CITY OF SEATTLE

Transportation Capital Funding Review

FINAL: December 2018

City of Seattle

BERK

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City of Seattle

Transportation Capital Funding Review | FINAL December 18, 2018

Executive Summary: Transportation Capital Funding Review

This memo reviews transportation capital project funding in the City of Seattle and comparable jurisdictions and estimates the annual cost burden of capital funding sources to individual household types, including the relative burden to low- and upper middle-income households. The purpose of this analysis is to support the City's exploration of implementing transportation impact fees to fund capital projects. This study addresses how different funding strategies impact the distribution of cost burden to different households and how cost burdens differ in jurisdictions that emphasize impact fees as a revenue stream.

First, BERK presents a high-level breakdown of transportation capital revenue sources and expenditures in Seattle, Bellevue, Tacoma, Kent, and unincorporated King County for the past five years. Generally, each jurisdiction has different combinations of funding streams including general taxes, fees, grants, intergovernmental transfers, Real Estate Excise Tax (REET), debt, and dedicated levies or voted initiatives.

Seattle funds transportation capital projects from a relatively even mix of sources (debt, voted levies, general taxes, REET, and others). Bellevue relies more heavily on debt, while Kent primarily funds transportation capital with a Street Business and Occupation Tax and the Solid Waste Utility Tax, and Tacoma relies primarily on grants and other intergovernmental transfers. Additionally, Seattle collects Vehicle Licensing Fees through a Transportation Benefit District (TBD), and Bellevue and Kent levy transportation impact fees.

Average annual spending, average annual population, and a comparison of per capita transportation capital spending is shown in Exhibit 1.

Per capita, Seattle invests a relatively higher amount in transportation capital than Kent, Tacoma, or unincorporated King County, and at a similar level as Bellevue. As regional employment centers with significant commute travel demand, it is expected that Seattle and Bellevue have somewhat higher per capita transportation capital spending than smaller cities or counties. Furthermore, not all funds used for transportation capital spending present individual cost burdens.

Exhibit 1. Washington Jurisdictions per Capita Transportation Capital Project Spending, 2013-2017 Average

	AVERAGE ANNUAL TRANSPORTATION CAPITAL SPENDING	POPULATION (PERIOD AVERAGE)	AVERAGE ANNUAL PER CAPITA TRANSPORTATION CAPITAL SPENDING
Seattle	$261,006,180	666,000	$392
Bellevue	$52,136,174	136,320	$382
Kent	$13,804,000	123,280	$112
Tacoma	$18,949,313	203,560	$93
Unincorporated King County	$48,736,514	250,282	$195

Note: Tacoma's total 2013-2017 spending is estimated from its total 2013-2018 historical actuals.
Sources: OFM, 2018; City of Seattle, 2018; City of Bellevue, 2018; City of Kent, 2018; City of Tacoma, 2018; King County, 2018; BERK, 2018.

Compared to two out-of-state jurisdictions, Denver and Portland, Seattle's per capita transportation capital spending is significantly higher (see Exhibit 2); however, funding sources are not consistent across states, making direct comparison difficult.

Exhibit 2. Seattle, Portland, and Denver per Capita Transportation Capital Project Spending, 2013-2017 Average

	AVERAGE ANNUAL TOTAL TRANSPORTATION CAPITAL SPENDING	POPULATION (PERIOD AVERAGE)	AVERAGE ANNUAL PER CAPITA TRANSPORTATION CAPITAL SPENDING
Seattle	$261,006,180	666,000	$392
Portland	$83,526,414	629,966	$133
Denver	$58,642,945	678,467	$86

Note: Portland's transportation capital spending data is based on its 2014-2018 CFP.
Sources: OFM, 2018; US Census, 2013-2017; City of Portland, 2014-2018; City and County of Denver, 2017; BERK, 2018.

To better understand the possible effect of impact fees on taxpayers, we analyze the typical annual cost burden to households for taxes and fees used by local jurisdictions to pay for transportation capital projects. We compare cost burdens across Seattle and peer jurisdictions for three household types that vary by household income, home owner versus renter, and number of vehicles owned. Exhibit 3 summarizes estimated direct household cost burdens in Seattle, Bellevue, Kent, and unincorporated King County.

We define direct household cost burden as property tax costs and household consumption costs; this includes sales tax, Motor Vehicle Fuel Tax (state gas tax) local distributions, and where applicable, Vehicle Licensing Fees under a Transportation Benefit District (TBD) and voted transportation levies. The impact of property tax costs is estimated for both owner and renter households.

Exhibit 3. Estimated Direct Annual Household Cost Burden for Transportation Capital Projects, 2018

	UPPER MIDDLE INCOME	MODERATE INCOME	LOW INCOME
Seattle	$417	$189	$169
Bellevue	$111	$53	$44
Kent	$44	$20	$19
Unincorporated King County	$375	$144	$89

Sources: King County Assessor's Office, 2018; Department of Revenue *Local Sales and Use Tax*, 2018; Department of Revenue *Tax Reference Manuel: Fuel Tax*, 2016; Department of Licensing *Vehicle Registration Local Fees*, 2018; City of Seattle *CAFR*, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle, 2018;, 2015; US Bureau of Labor Statistics *Consumer Expenditure Survey*, 2016; City of Bellevue *CAFR*, 2017; City of Bellevue *Transportation Impact Fees*, 2018; City of Bellevue, 2018; City of Kent *CAFR*, 2017; City of Kent *Transportation Impact Fees*, 2018; City of Kent, 2018; King County *CAFR*, 2013-2017; King County, 2018; BERK, 2018.

Direct costs do *not* include transportation impact fees and Real Estate Excise Tax (REET), which potentially present indirect costs as development costs that may be passed onto owner households or renters households living in buildings constructed after impact fees were in place. These potential costs are summarized in Exhibit 4.

Exhibit 4. Estimated Potential Indirect Annual Household Cost Burden for Transportation Capital Projects, 2018

	UPPER MIDDLE INCOME	MODERATE INCOME	LOW INCOME
Seattle	$77	$22	$17
Bellevue	$393	$169	$161
Kent	$293	$139	$0
Unincorporated King County	$4	$1	$0.5

Sources: King County Assessor's Office, 2018; Department of Revenue *Local Sales and Use Tax*, 2018; Department of Revenue *Tax Reference Manuel: Fuel Tax*, 2016; Department of Licensing *Vehicle Registration Local Fees*, 2018; City of Seattle *CAFR*, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle, 2018;, 2015; US Bureau of Labor Statistics *Consumer Expenditure Survey*, 2016; City of Bellevue *CAFR*, 2017; City of Bellevue *Transportation Impact Fees*, 2018; City of Bellevue, 2018; City of Kent *CAFR*, 2017; City of Kent *Transportation Impact Fees*, 2018; City of Kent, 2018; King County *CAFR*, 2013-2017; King County, 2018; BERK, 2018.

Comparing transportation spending to the direct household cost burden points to the following findings:

- Seattle has a **higher direct household cost burden** across all household types. This is largely due to its **two voted initiatives**: a Transportation Benefit District (TBD) with Vehicle Licensing Fees and the Transportation Levy to Move Seattle. Comparable voter-approved initiatives do not exist in the other jurisdictions analyzed. In unincorporated King County, there is a much **greater difference in cost burden by income level** compared to Seattle. Almost all unincorporated county funding comes from the Road Fund levy, which falls primarily on homeowners. In Seattle, most funding is split between the Move Seattle Levy (primarily affecting homeowners) and the TBD (based on vehicles, not home ownership). Higher real estate values in Seattle also result in more property tax burden passed on to renter households.
- Bellevue and Kent have significantly lower direct household cost burdens than Seattle. However, these two cities also levy **transportation impact fees** which shift capital tax burden to development costs that can be indirectly passed onto owner or renter households. Kent's impact fees have only been in place since 2010, so this study assumes they are not passed on to low-income households living in older housing stock.
- Bellevue spends approximately the same amount per capita as Seattle on transportation capital (Exhibit 1); however, due to its use of REET and impact fees rather than a voted property tax levy, **more burden is placed on development**, which can indirectly affect both homeowners and renters. Bellevue also uses debt more heavily to finance transportation capital.
- Kent, which primarily funds its transportation capital with a Street Business and Occupation tax, places a **heavier direct burden on businesses**, rather than on households.

This study does not directly examine the potential impacts of the City of Seattle adding a transportation impact fee to the mix of transportation while maintaining its current levels of transportation investment.

However, these findings suggest that this action could have some potential to reduce the relative cost burden to existing low- and moderate-income households living in units not subject to a new transportation impact fee. This assumes that the new impact fees are set at a level low enough to avoid becoming a significant disincentive for developers to build new housing in Seattle. A reduction in total future housing production could result in increased competition for housing and potentially drive up housing costs across all housing types.

Transportation Capital Funding in Washington Jurisdictions

This section presents a high-level breakdown of transportation capital improvement program revenue sources and expenditures in Seattle, Bellevue, Tacoma, Kent, and King County over the past five years (2013-2017). Below are typical funding sources and expenses related to transportation capital:

Revenues

While revenue sources vary by jurisdiction, some common sources of transportation capital project funding include:

- General taxes (Property, Sales, Business and Occupation Taxes)
- Federal and state grants
- Real Estate Excise Tax (REET) I and II
- Transportation impact fees
- Debt and bond proceeds
- Levies or other local funds
- Transportation Benefit District (Vehicle Licensing Fees or Sales Tax)
- Washington State Motor Vehicle Fuel Tax (Gas Tax)

Expenditures

Categories of transportation capital projects also vary across jurisdictions; some typical types of transportation capital projects include:

- Roadway rehabilitation
- Street overlay
- Bridges
- Facilities
- Walkways and bikeways
- Maintenance
- Streetscape
- Traffic controls, signals, and lights

BERK contacted finance staff at each jurisdiction to obtain available transportation capital revenue and expenditure data. We then categorized these revenue and expenses into seven key revenue categories:

- Grants and intergovernmental transfers
- Taxes and fees
- Impact fees, system development charges, or other mitigation revenue
- Debt
- REET
- Voted transportation levies
- Other sources

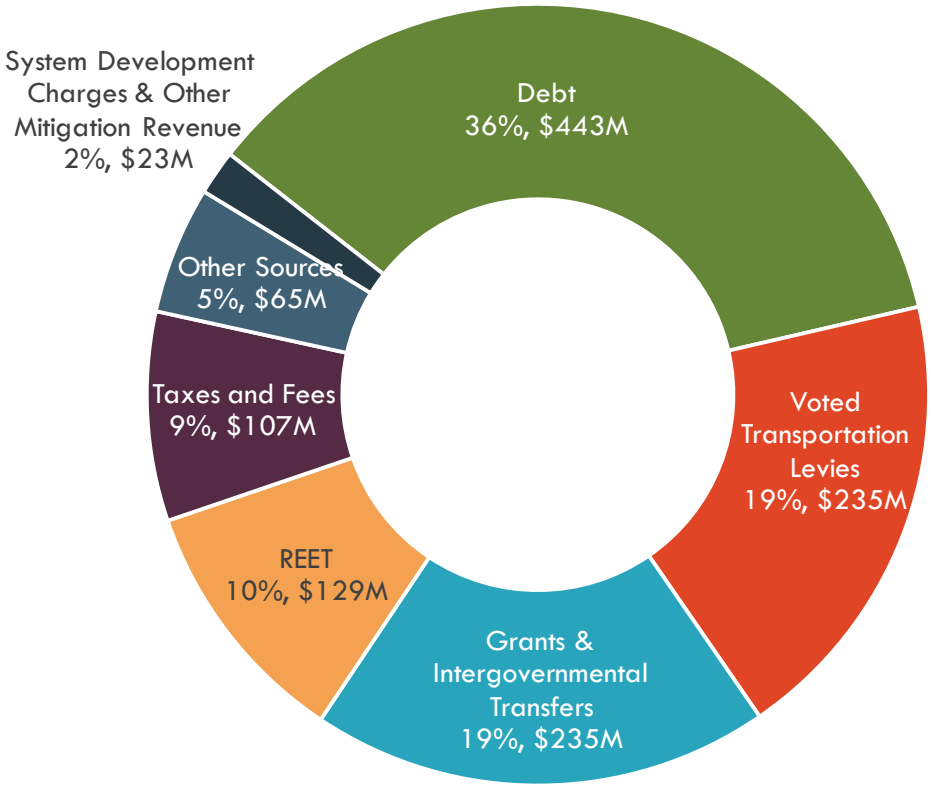
CITY OF SEATTLE

Revenues

The City's transportation capital funding is primarily supported by debt, voted transportation levies, and grants and intergovernmental transfers. Move Seattle is a 9-year, $930 million levy approved by voters in November 2015 to fund transportation needs. It replaces the Bridging the Gap initiative (labeled "Transportation Funding Package" below), which was approved by voters in 2006 and included a parking tax, business tax, and property tax levy lid lift. The City has established a Transportation Benefit District and collects Vehicle Licensing Fees. The City also levies REET I and II. The data below is based on historical Capital Improvement Programs (CIPs).

Exhibit 5. Seattle Transportation Capital Project Funding Revenues, 2013-2017 Total

Total Five-Year Transportation Capital Revenues: $1,238 million



Sources: City of Seattle; 2013 data is from 2013-18 CIP; 2014 data is from 2014-19 CIP; 2015 is from 2015-2020 CIP; 2016 data is from 2016-17 CIP; 2017 data is from 2017-2022 CIP; BERK, 2018.

Voted transportation levies:

- *Transportation Levy to Move Seattle*
- *Transportation Funding Package Levy*

Grants/Intergovernmental transfers:

- *Federal Funds*
- *State grants*
- *State gas tax (MVFT)*
- *County funds*
- *Sound transit funds*
- *Inter-department transfers*

Other taxes and fees:

- *Transportation Funding Package business tax/parking tax*
- *User fees & camera ticket fees*
- *Drainage/wastewater fees*
- *General subfund*

Other sources:

- *Other misc. local funds*
- *Private donations*

Impact fees, system development charges, or other mitigation revenue:

- *Transportation Benefit District: Vehicle Licensing*

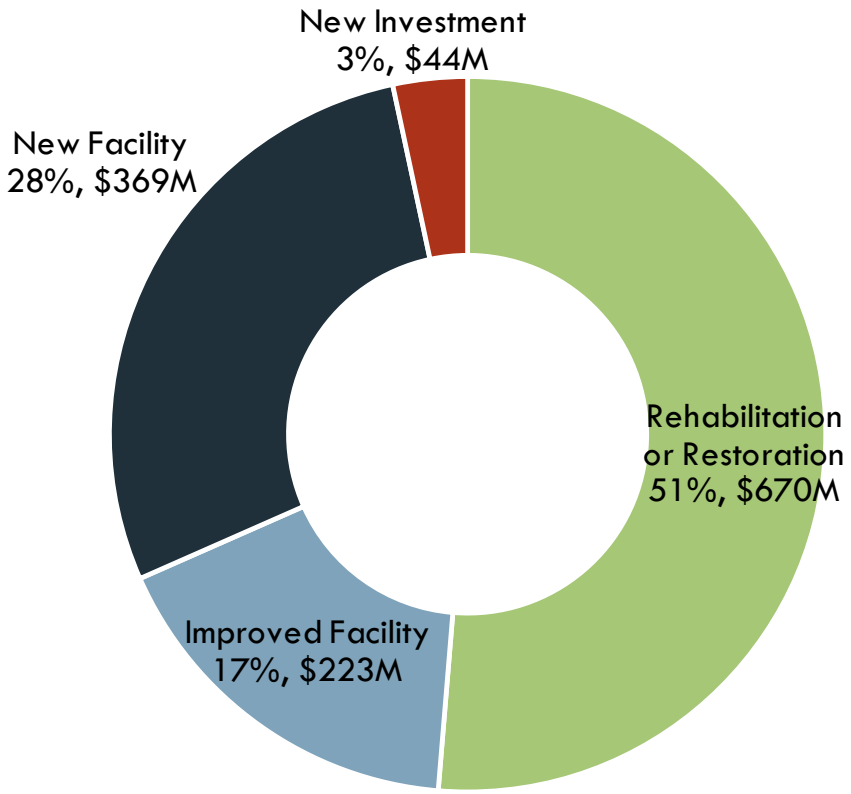
Expenses

Seattle's transportation capital project expenses are categorized as rehabilitation or restoration, improved facility, new facility, or new investment. About half of transportation capital project expenses over the last five years were invested in rehabilitation or restoration projects. Seattle spent $1.35 billion on transportation capital projects from 2013 to 2017.

The data below is based on historical CIPs.

Exhibit 6. Seattle Transportation Capital Project Expenses, 2013-2017 Total

Total Five-Year Transportation Capital Project Expenses: $1,305 million



Sources: City of Seattle; 2013 data is from 2013-18 CIP; 2014 data is from 2014-19 CIP; 2015 is from 2015-2020 CIP; 2016 data is from 2016-17 CIP; 2017 data is from 2017-2022 CIP; BERK, 2018.

CITY OF BELLEVUE

Revenues

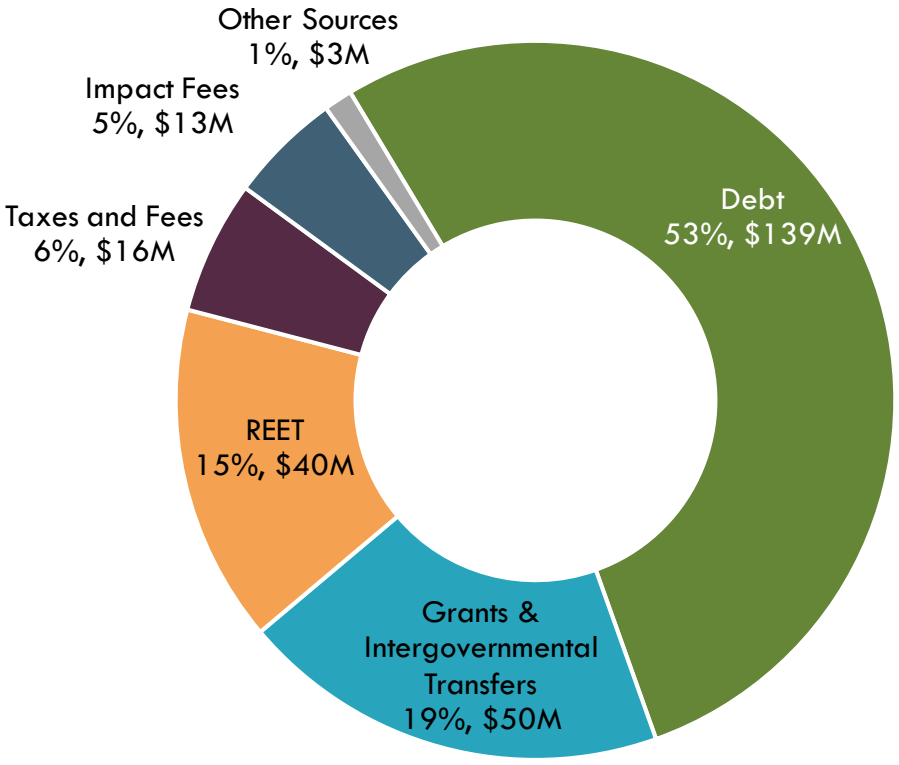
The City of Bellevue levies Transportation Impact Fees (adopted in 1989) and collects REET I and II. Most of Bellevue's transportation capital funding is supported by debt, REET, and grants. For each year between 2013 and 2017, Bellevue funded between 25-75% of its transportation capital using debt.

Bellevue has received federal grants including CMAQ, TAP, and STP; and state grants including funding from the Department of Commerce, TIB, and WSDOT. Interlocal funds primarily refer to funding from Sound Transit. Bellevue also collects sales tax, Business & Occupation tax, and annexation sales tax.

The data below reflects historical actuals.

Exhibit 7. Bellevue Transportation Capital Project Funding Revenues, 2013-2017 Total

Total Five-Year Transportation Capital Revenues: $261 million



Taxes and fees:
- *Property tax*
- *Sales tax*
- *B&O tax*
- *Annexation sales tax*

Grants/Intergovernmental transfers:
- *Grants*
- *State shared revenue*
- *Interlocal contributions*
- *Transfer from other City funds*

Impact fees, system development charges, or other mitigation revenue:
- *Transportation impact fees*

Other sources:
- *Rents/leases*
- *Private contributions*

Sources: City of Bellevue, 2018; BERK, 2018.

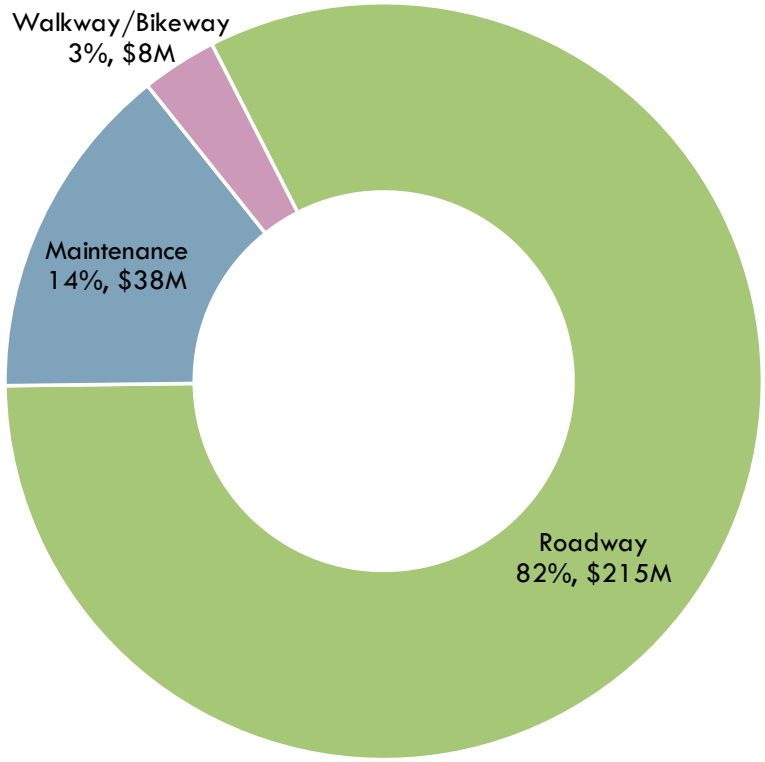
Expenses

Bellevue spent $261 million on transportation capital projects over the last five years. Projects include roadways, maintenance/minor capital, and walkways/bikeways. Eighty-two percent of this was spent on roadways, which include corridor improvements and roadway design, development, and construction. Maintenance includes overlay and minor capital such as signals and lighting. Walkways and bikeways include trails, pedestrian facilities, and bike facilities.

The data below reflects historical actuals.

Exhibit 8. Bellevue Transportation Capital Project Expenses, 2013-2017 Total

Total Five-Year Transportation Capital Project Expenses: $261 million



Sources: City of Bellevue, 2018; BERK, 2018.

CITY OF KENT

Revenues

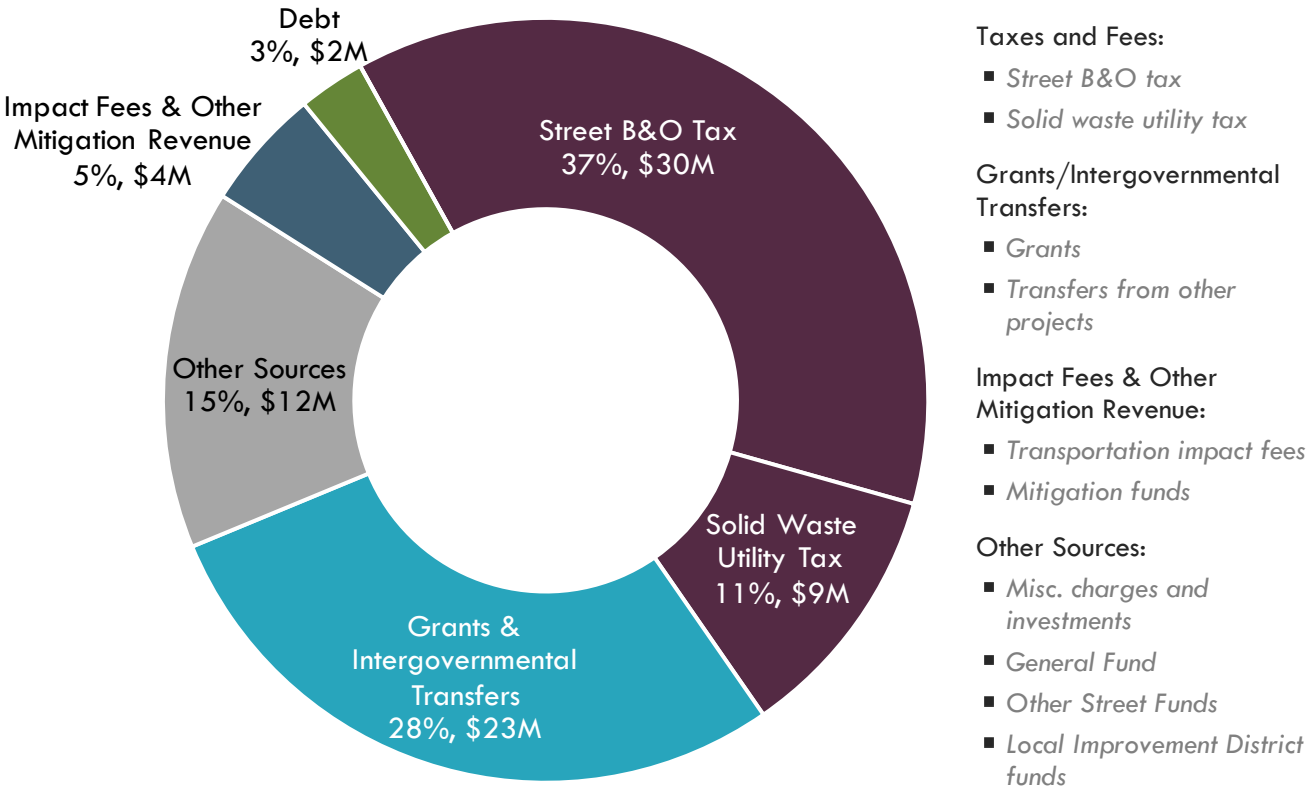
The City of Kent funds transportation capital projects through its Street Capital Projects Fund, which primarily consists of its Street Business & Occupation Tax, Solid Waste Utility Tax, and grants and intergovernmental transfers. Unlike other cities, Kent levies a Street Business and Occupation Tax (established in 2013), which specifically pays for critical street repairs to ensure a safe and efficient transportation system. The B&O tax is based on two components, a gross receipts tax and square footage tax; businesses pay the greater of the two categories.[1] From 2013-2017, the Street B&O tax funded 37% of all transportation capital expenses.

Kent also levies transportation impact fees (adopted in 2010) and collects REET I and II. REET revenues feed into the Capital Resources Fund, which funds non-street related capital and operating projects (non-transportation capital and therefore not shown in the exhibit below).[2]

The data below reflects historical actuals.

Exhibit 9. Kent Transportation Capital Project Funding Revenues, 2013-2017 Total

Total Five-Year Transportation Capital Revenues: $79 million



Sources: City of Kent, 2018; BERK, 2018.

[1] Guide to the City of Kent's Business and Occupation Tax, January 1, 2018. https://www.kentwa.gov/home/showdocument?id=4453

[2] City of Kent, Comprehensive Annual Financial Report, 2017.

Expenses

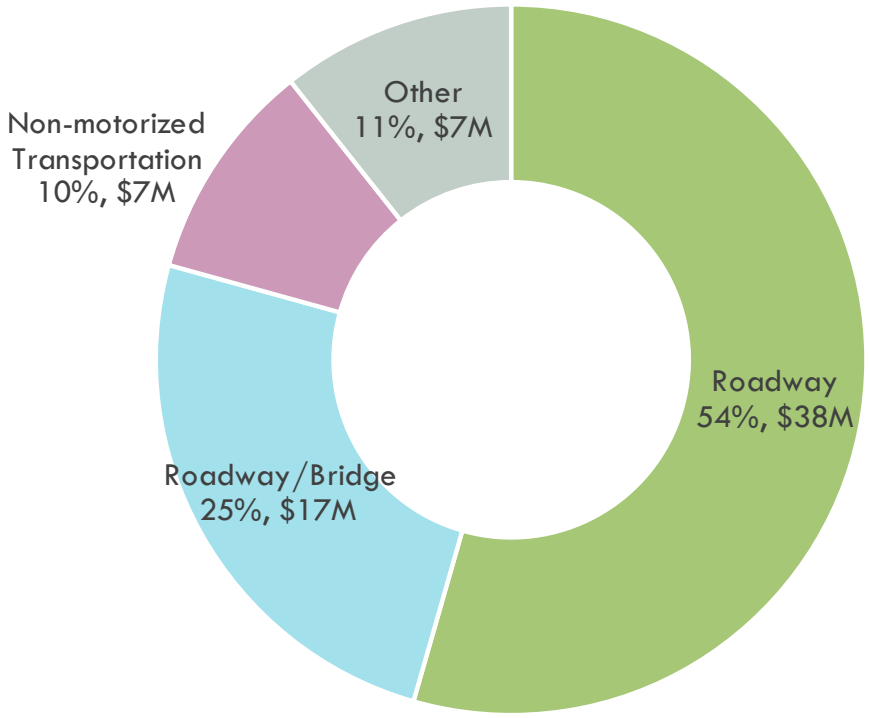
Kent spent approximately $69 million over the five-year period on transportation capital projects, which the City categorizes as roadways, roadways/bridges, non-motorized transportation, and other.

Projects listed as "other" refer to transportation items not related to roadway, non-motorized transportation, and bridges. This includes neighborhood traffic control, signal system replacements, traffic island landscaping, and LED street light conversion.

The data below reflects historical actuals.

Exhibit 10. Kent Transportation Capital Project Expenses, 2013-2017 Total

Total Five-Year Transportation Capital Project Expenses: $69 million



Sources: City of Kent, 2018; BERK, 2018.

CITY OF TACOMA

Revenues

Most of Tacoma's funding for transportation capital projects comes from federal grants, along with state grants and the state Motor Vehicle Fuel Tax (gas tax). Tacoma also uses debt and collects REET I and II.

Tacoma established a Transportation Benefit District in November 2012 and began collecting vehicle licensing fees in June 2013. According to Tacoma's *2015 Transportation Master Plan,* Tacoma receives approximately $4 million per year from this source; however, TBD is a special revenue fund that directs those revenues to street improvements. According to City of Tacoma staff, TBD funding does not show up in the exhibit below since it is primarily used for maintenance rather than capital projects.

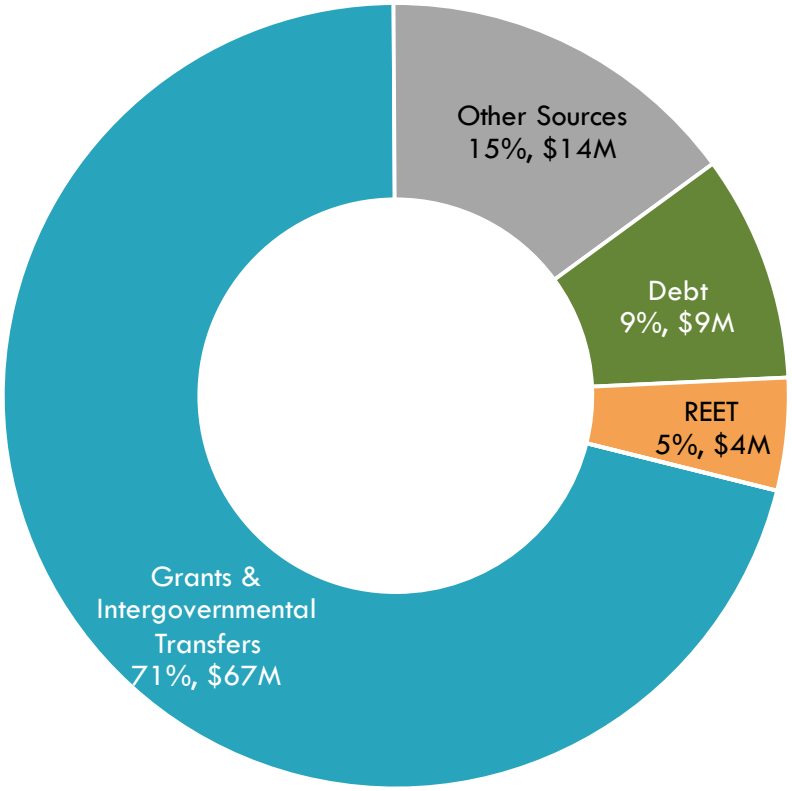
Most of the private funding is provided through local improvement districts (LID).

The Tacoma Streets Initiative is a 2015 voter-approved initiative that raises funds through an increase in taxes and is set to expire in ten years. Voter-approved taxes are estimated to bring in $175 million; along with grants and matching funds estimating $120 million and a City contribution of $30 million, this is estimated to bring in $325 million for Tacoma's streets over ten years. The Streets Initiative supports both maintenance and capital uses.

The data below for 2013-2017 is estimated using total 2013-2018 historical actuals.

Exhibit 11. Tacoma Transportation Capital Project Funding Revenues, 2013-2017 Total

Total Five-Year Transportation Capital Revenues: $95 million (estimate)



Grants/Intergovernmental transfers:

- *Federal grants*
- *State grants*
- *State gas tax (MVFT)*
- *Other government agencies*

Other sources:

- *Interest earnings*
- *Public utility*
- *Private contributions*
- *Public works street operations*

Impact fees, system development charges, or other mitigation revenue

- *Transportation Benefit District: Vehicle Licensing Fees (primarily used for maintenance, not capital)*

Sources: City of Tacoma, 2018; BERK, 2018. The 2013-2017 total estimate is estimated from total historical actuals from the 2013-2018 period. The 2013-2018 historical actuals are provided in the Appendix.

Expenses

Tacoma's transportation capital project expenses are shown below. Tacoma's Capital Facilities Plan includes four transportation facility program areas:

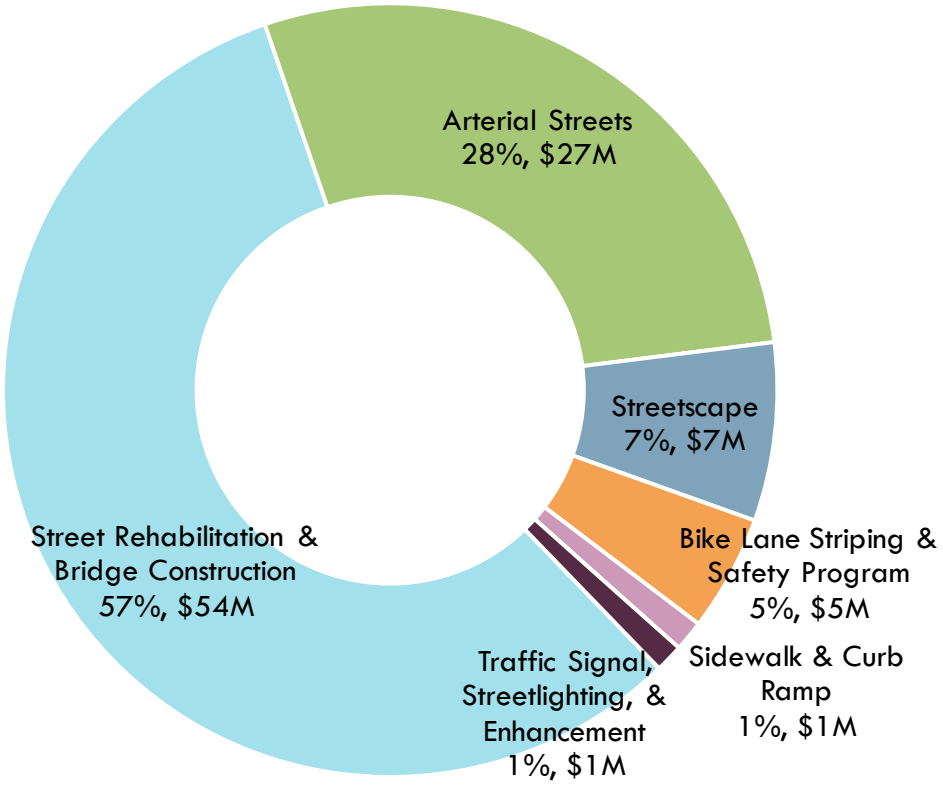
- Non-motorized transportation and streetscape
- Road systems and amenities
- Municipal parking facilities
- Municipal railway

Transportation capital projects cover two of these areas, non-motorized transportation and streetscape, and road systems and amenities.

The data below is based on historical actuals.

Exhibit 12. Tacoma Transportation Capital Project Expenses, 2013-2017 Total

Total Five-Year Transportation Capital Project Expenses: $95 million (estimate)



Sources: City of Tacoma, 2018; BERK, 2018. The 2013-2017 total estimate is estimated from total historical actuals from the 2013-2018 period. The 2013-2018 historical actuals are provided in the Appendix.

KING COUNTY

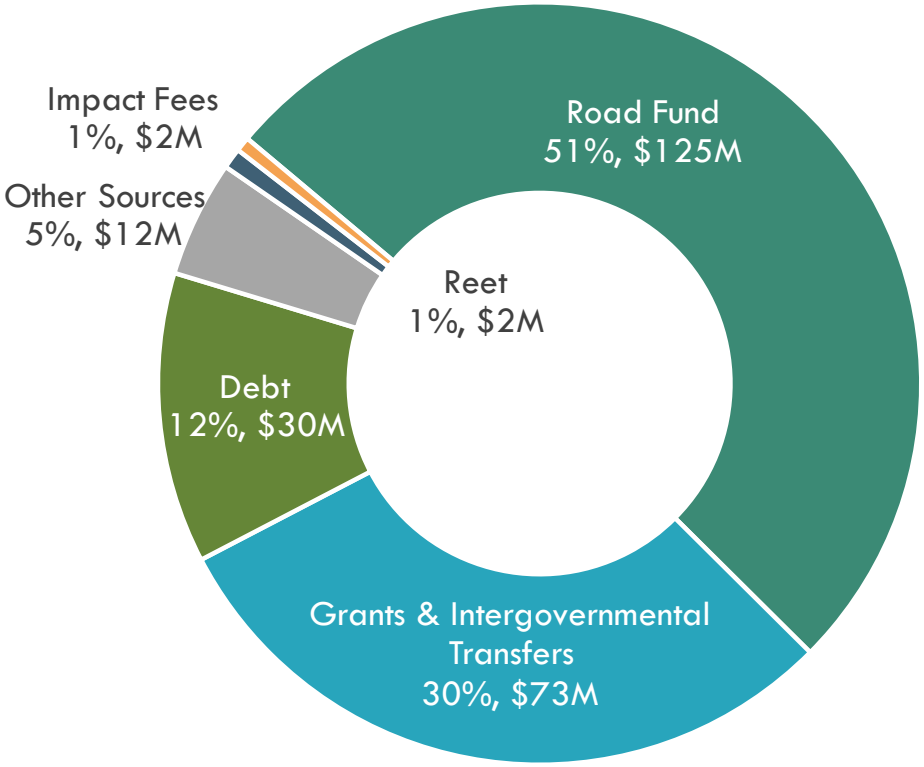
Revenues

King County primarily funds transportation capital projects from the County Road Fund. The County Road Fund includes a property tax levied in unincorporated areas, the Road Fund portion of the state Motor Vehicle Fuel Tax (gas tax), and general County contributions. The County collects REET I and II, and it no longer collects Transportation Impact Fees (called Mitigation Payment System, or MPS) as of the beginning of 2017. King County has established a Transportation Benefit District, but it is currently unfunded; the County is not currently collecting any vehicle licensing fees or sales tax under the TBD.

The data below reflects historical actuals.

Exhibit 13. King County Transportation Capital Project Funding Revenues, 2013-2017 Total

Total Five-Year Transportation Capital Revenues: $244 million



Road Fund:

- *Property tax: unincorporated areas of King County*
- *State gas tax (MVFT)*
- *General County contributions*

Grants/Intergovernmental transfers:

- *Grants*
- *Other agencies*

Impact fees, system development charges, or other mitigation revenue:

- *Transportation impact fees (no longer funded in 2017)*

Other sources:

- *Sale of land*
- *Miscellaneous*

Sources: King County, 2018; BERK, 2018.

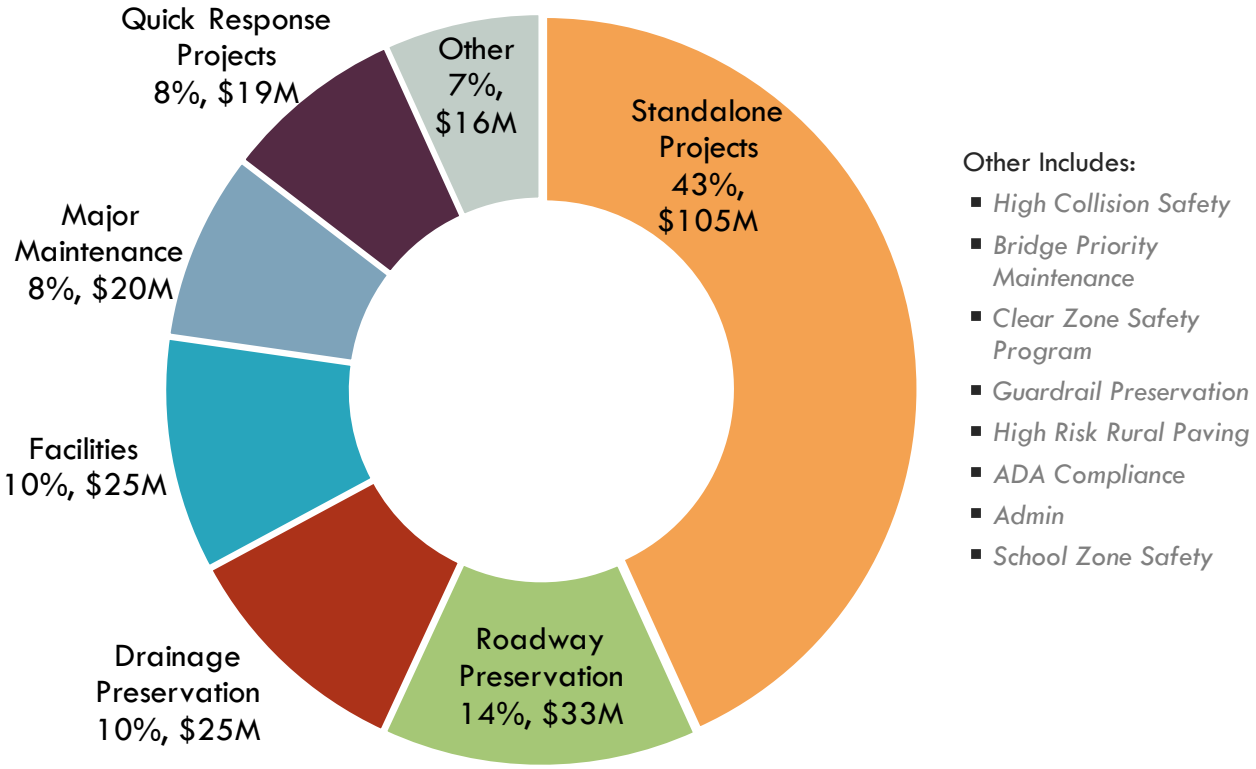
Expenses

King County invests in a range of transportation capital projects. Almost half of funding is spent on standalone projects, followed by spending on roadway preservation, drainage preservation, facilities, and major maintenance. The County invested $244 million on transportation capital projects over the last five years.

The data below reflects historical actuals.

Exhibit 14. King County Transportation Capital Project Expenses, 2013-2017 Total

Total Five-Year Transportation Capital Project Expenses: $244 million



Sources: King County, 2018; BERK, 2018.

PER CAPITA TRANSPORTATION CAPITAL SPENDING

Exhibit 15 compares per capita transportation capital spending by jurisdiction, based on total transportation capital project spending data provided by each jurisdiction and the April 1st population estimates from the Office of Financial Management (OFM).

Exhibit 15. Washington Jurisdictions per Capita Transportation Capital Project Spending, 2013-2017 Average

	AVERAGE ANNUAL TRANSPORTATION CAPITAL SPENDING	AVERAGE ANNUAL POPULATION	AVERAGE ANNUAL PER CAPITA TRANSPORTATION CAPITAL SPENDING
Seattle	$261,006,180	666,000	$392
Bellevue	$52,136,174	136,320	$382
Kent	$13,804,000	123,280	$112
Tacoma	$18,949,313	203,560	$93
Unincorporated King County	$48,736,514	250,282	$195

Note: Tacoma's total 2013-2017 spending is estimated from its total 2013-2018 historical actuals.
Sources: OFM, 2018; City of Seattle, 2018; City of Bellevue, 2018; City of Kent, 2018; City of Tacoma, 2018; King County, 2018; BERK, 2018.

From 2013-2017, Seattle spent approximately $392 per capita on transportation capital spending, comparable to Bellevue at $382 per capita over five years. Kent spent approximately $112 per capita and Tacoma spent $93 per capita. Unincorporated King County spent approximately $195 per capita over the five-year period.

Transportation Capital Funding Outside Washington

This section reviews current funding of transportation capital projects for out-of-state jurisdictions for comparison with the City of Seattle. We present a high-level breakdown of transportation capital improvement program revenue sources and expenditures in Portland, Oregon (2014-2018) and Denver, Colorado (2013-2017).

BERK contacted transportation finance staff at both the City of Portland and City and County of Denver, and used publicly available transportation finance documents at their direction. Due to significant differences in how transportation capital projects are funded, organized, and reported, the transportation capital project funding revenue and expenditure categories are different from those presented in Washington jurisdictions.

CITY OF PORTLAND

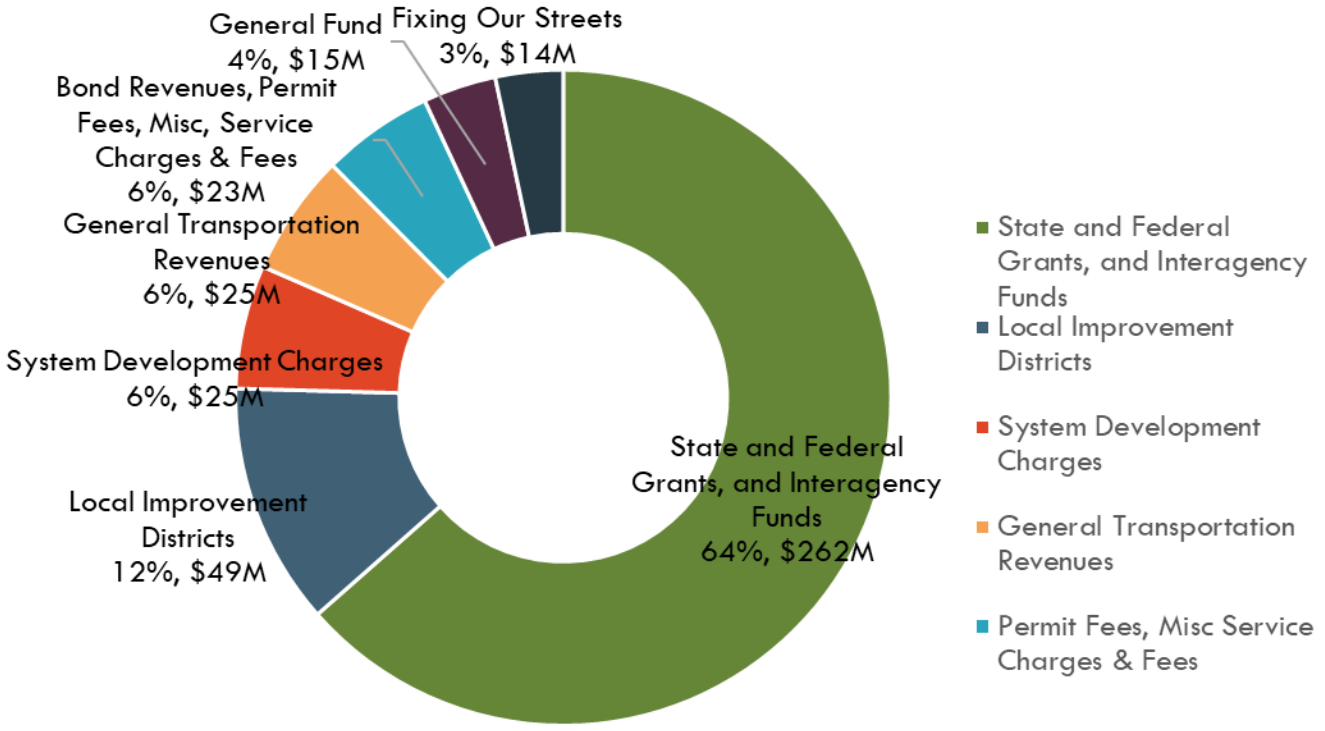
The City of Portland did not provide detailed transportation capital funding data for 2013; to keep a five-year period of analysis stable across all comparable cities in phases 1 and 2, BERK used Portland's 2014-2018 CIPs. Portland provides a five-year projection for each CIP; the first year of data from each CIP is presented here.

Revenues

Revenues for Portland's transportation CIP are reported in three or four fund categories, depending on the year, with narrative descriptions of the revenue streams within each category that sometimes provide more financial detail. When possible, BERK tracked the narratively described revenue streams across CIPs to provide a greater level of detail. Major revenue sources for Portland's transportation CIPs include:

- **State and Federal Grants and Interagency Funds:** funds from federal, state, and regional sources (e.g., Portland Development Commission, Port of Portland, and TriMet).
- **Local Improvement Districts**: a cooperative of property owners who share in the cost of infrastructure improvements, financed, and often subsidized by the City.
- **System Development Charges**: charges to permitted development that impact public infrastructure.
- **General Transportation Revenues:** Portland's share of the State Highway Fund (motor fuels tax, vehicle titling and registration fees, and weight-mile tax imposed on trucks) and revenues from the City's parking program.
- **Fixing Our Streets:** revenues from two dedicated sources, one voter-approved tax for street repair and one Council-passed Heavy Vehicle Use Tax.

Exhibit 16. Portland Transportation Capital Project Revenues, 2014-2018 Total

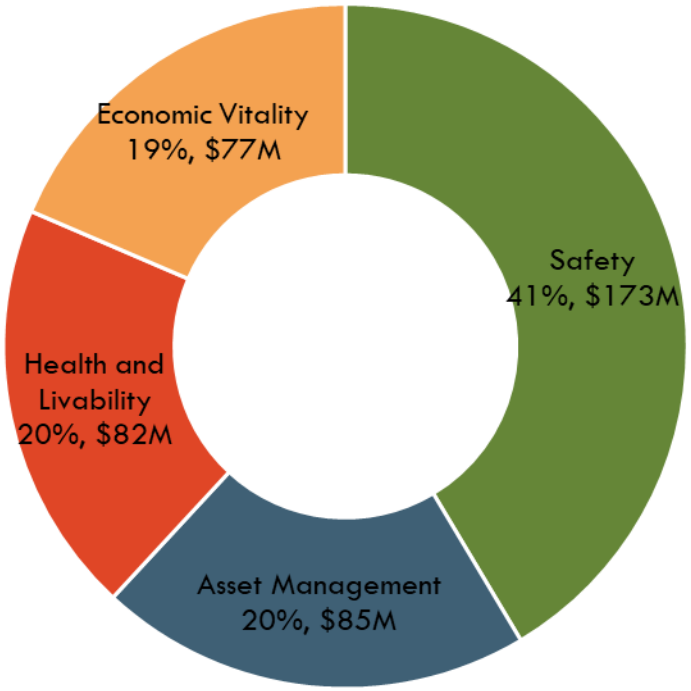


Sources: City of Portland, 2014-2018; BERK, 2018.

Expenses

Portland categorizes its CIP listed transportation capital projects into four categories: safety, asset management, health and livability, and economic vitality. For some projects listed, the expenditure categories used in the analysis of Washington jurisdictions (bridges, walkways and bikeways, and traffic controls, signals, and lights) could be applied based on information available. For most projects, however, none of the categories could be accurately applied from the given project information. Transportation capital projects are presented using Portland's expenditure categories below.

Exhibit 17. Portland Transportation Capital Project Expenses, 2014-2018 Total



Sources: City of Portland, 2014-2018; BERK, 2018.

CITY AND COUNTY OF DENVER

Transportation in the City and County of Denver is housed in the Public Works Department. Denver does not complete an annual CIP. BERK completed a Colorado Open Records Act request for revenues and expenditures specific to Public Works Transportation and was directed to budgetary documents. Annual budgeted revenues and expenditures are used for years 2013-2017.

Revenues

Denver does not have a fund specific to Public Works Transportation capital projects. The Capital Improvement Fund (CIF) is used for all city-wide capital improvement projects, as are other major capital improvement revenue sources, including bond proceeds and grants and contracts. Revenue sources for the CIF include several streams restricted to specific departments and other streams used across many departments. Below, BERK presents the total listed revenue streams that were eligible for use in Public Works Transportation capital projects.

Major restricted revenue sources eligible for use in transportation capital projects include:

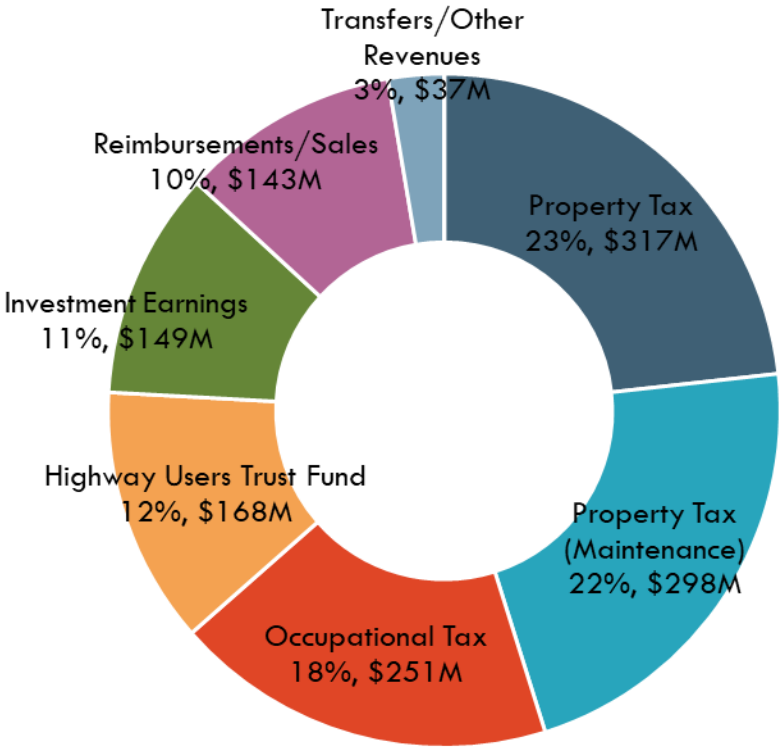
- **Highway User Trust Fund:** distributions from State collections of road safety surcharges, oversize/overweight surcharges, rental car surcharges, and late vehicle registration fees (CIF).
- **Property Tax – Maintenance:** a voter-approved property tax dedicated to capital maintenance and general fund transfers (CIF).

Major unrestricted revenue sources eligible for use in transportation capital projects include:

- **Property Tax** (CIF)
- **Investment Earnings** (CIF)
- **Reimbursements/Sales of Assets** (CIF)
- **Transfers/Other Revenues** (CIF)
- **Bond Proceeds** (standalone fund)
- **Grants/Miscellaneous Proceeds** (standalone fund)

In total, $1.4 billion was eligible for use in Public Works Transportation capital projects between 2013-2017; Public Works Transportation projects cost $1.2 billion from 2013-2017, or 86% of eligible CIF.

Exhibit 18. Denver Transportation Capital Project Revenues, 2013-2017 Total



Sources: City and County of Denver, 2013-2017; BERK, 2018.

Expenses

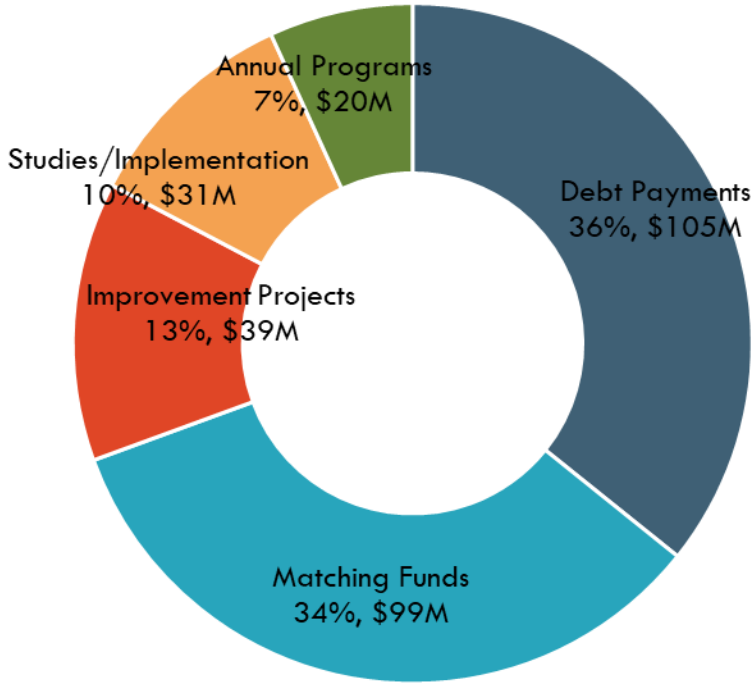
Denver provides total capital improvement spending by agency, with total Public Works Transportation spending of $1.2 billion from 2013-2017. Denver divides that total by fund: Capital Improvement Funds (CIF), bond proceeds, and grants and miscellaneous proceeds.

Transportation capital projects using CIF are listed in the following categories: debt payments, matching funds, improvement projects, studies/implementation, and annual programs. Projects of various Phase 1 types are included in each category, including some that are identifiable and many that are not.

Projects funded in part or in full by bond proceeds or grants and miscellaneous proceeds are not listed in detail in those funds' financial notes. Though some bonds are specific to Public Works, it is not clear that those bonds are specific to Public Works Transportation. Similarly, it is unclear that the projects listed in the financial notes for Grants and Miscellaneous Proceeds are specific to Public Works Transportation.

Denver's breakdown of Public Works Transportation project CIF expenditures is presented below.

Exhibit 19. Denver Transportation Capital Improvement Fund Expenses, 2013-2017, Total



Sources: City and County of Denver, 2013-2017; BERK, 2018.

Transportation Capital Cost Burden Analysis

In this section, BERK analyzes the typical cost burden to individual households for taxes and fees used by local jurisdictions to pay for transportation capital projects. Drawing from the typical revenue sources for transportation capital projects identified earlier in this analysis, we compare the relative cost burdens across Seattle and peer jurisdictions for three household types that vary by household income, owner versus renter, and number of vehicles owned. We present the cost burdens as total annual costs per household, as well as annual cost as a percentage of household income. The analysis focuses on the cities of Seattle, Bellevue, and Kent, as well as unincorporated King County.

APPROACH

Define Household Types

We calculate total annual costs and cost burden for the following three household types:

- **Upper middle-income homeowner household**
  - Income: 150% of Area Median Income (AMI)
  - Owner of median price single family home (based on jurisdiction)
  - Owns two cars
- **Moderate-income renter household**
  - Income: 80% of AMI
  - Rents typical apartment in a newer building, built year 2000 or after
  - Owns one car
- **Low-income renter household**
  - Income: 50% of AMI
  - Rents typical apartment in an older building, built prior to year 2000
  - Owns one car

See the Appendix for household income, home value, and vehicle assumptions used in this cost burden analysis.

Identify Costs to Households

Next, BERK reviewed all local revenue sources for transportation capital and identified those which are paid directly or indirectly by households. These fall into two categories:

- **Direct Household Costs:** Ongoing or annual taxes and fees such as property taxes, vehicle fees, or sales tax on household consumption. Even though property taxes are not directly paid by renter households, this analysis includes these costs in this category under the assumption that property taxes are passed on to renters in full on a per unit basis. Doing so enables an easier comparison across household types.
- **Potential Indirect Household Costs:** Many communities generate revenue for capital projects from taxes or fees on development and real estate transactions. These can raise the cost of housing, and these costs can be passed on to individual households in the form of increased housing costs. Examples include impact fees, REET, and sales tax on construction.

*Revenues **not** considered in this analysis:*

- **Federal and state grants**, which are irregular and associated with state or federal taxes that are paid by all.
- **Regional Transit Authority Motor Vehicle Excise Tax (MVET)**, which applies to Sound Transit, since those revenues are not directed toward cities and counties.
- **SEPA mitigation**, which may impact housing costs but do not have a standard rate schedule.
- **Sales tax on construction** is not calculated as a potential indirect household cost.

METHODOLOGY

We use the methodology outlined below to calculate the household cost burden for both owner and renter households based on 2018 tax and fee rates. Below is a summary of the methodology. A detailed methodology is provided in the Appendix.

- **Property Tax (City or County portion):** We calculate the property tax paid annually, determine the proportion of property taxes that go to transportation CIP, and then calculate the amount of property tax paid per owner or renter household to transportation CIP.
- **Sales tax on household consumption (local portion):** We estimate annual consumer spending, determine the proportion of sales taxes that go to transportation CIP, then calculate the local sales tax paid per owner or renter household to transportation CIP.
- **REET (local portion):** For homeowners, we determine the proportion of REET that goes to transportation CIP, calculate tax as a one-time cost of buying a home, then annualize the cost of monthly mortgage payments based on the 30-year fixed rate for REET. For renters, we calculate the average REET paid for property acquisition for apartment projects per unit, then annualize the average cost per unit based on market capitalization rates for multifamily development.
- **Transportation Benefit District (Vehicle Licensing Fees):** We calculate annual fees based on household vehicle assumptions.
- **Motor Vehicle Fuel Tax (State gas tax, City or County distribution):** We estimate the average annual household fuel spending, then use the state distribution to local jurisdictions to calculate total annual MVFT paid for each household type to transportation CIP.
- **Transportation Impact Fees:** We use the single-family transportation fee for owner households and the multi-family transportation impact fee for renters, and then annualize the cost based on either the 30-year fixed rate (for owner households) or market capitalization rates for multifamily development (for renter households). Following our assumption that low-income renters are living in apartments built prior to 2000, we assume that if transportation impact fees were adopted by a city after 2000, then low-income renters are not impacted by indirect costs of transportation impact fees.

TAX BURDEN COMPARISON

For each jurisdiction, we present the total tax burden by household type (upper middle-income homeowner, moderate-income renter, and low-income renter). Direct household costs and costs to development are treated separately in the following charts, since there is less certainty about how costs to development are passed on to households. This is followed by a presentation of combined cost burden.

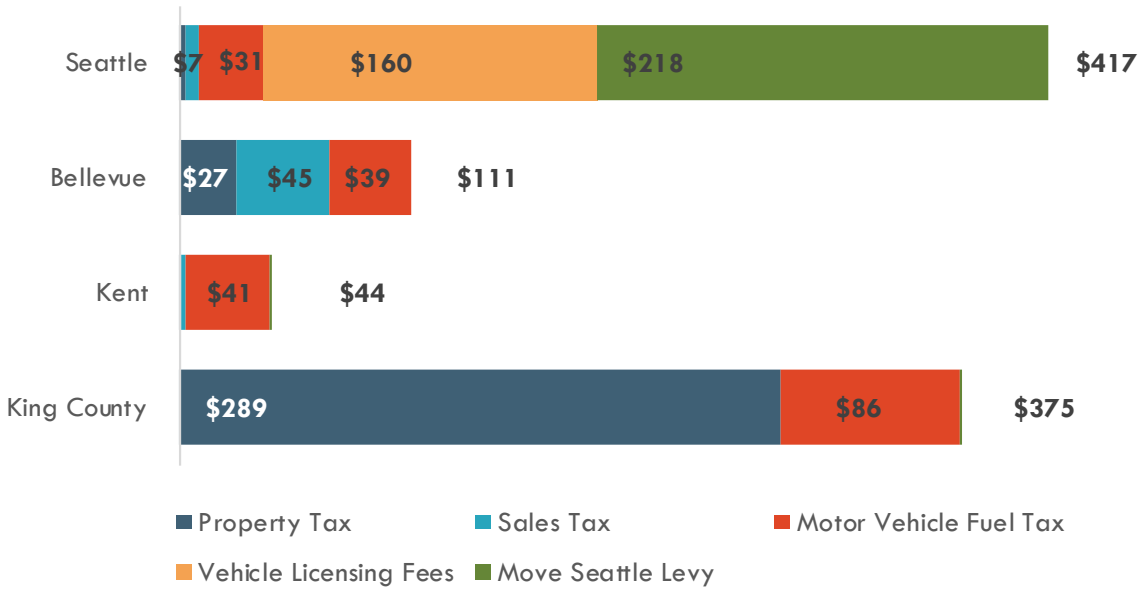
Exact amounts for each cost are available in the tables provided in each comparison jurisdiction's cost burden detail.

Cost Burden from Direct Household Costs

The comparison jurisdictions rely on various consumption-based and direct revenue sources for transportation capital projects. Consumption-based revenue sources are recurring, variable costs determined by the household's level of consumption for each type. Sales tax, motor vehicle fuel tax, and vehicle licensing fees are considered consumption costs for this analysis. Property tax is a direct cost with similarities to consumption costs: both are recurring and variable.

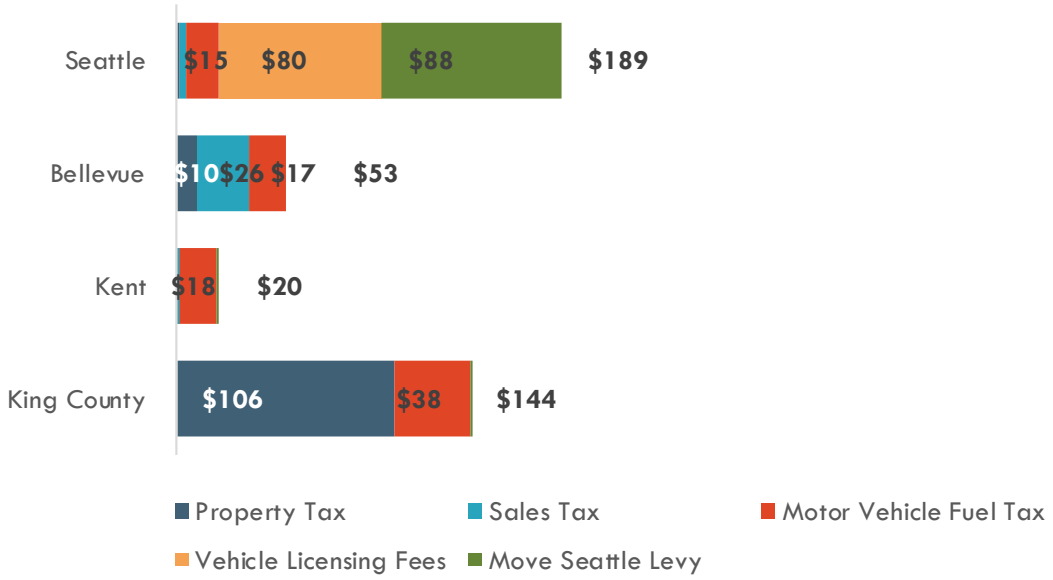
In this analysis, we refer to direct costs as property tax costs and consumption costs. Exhibit 20, Exhibit 21, and Exhibit 22 show direct costs by source and total direct cost burden for upper middle-income, moderate-income, and low-income households, respectively.

Exhibit 20. Upper Middle-Income Household Direct Cost Burden, 2018



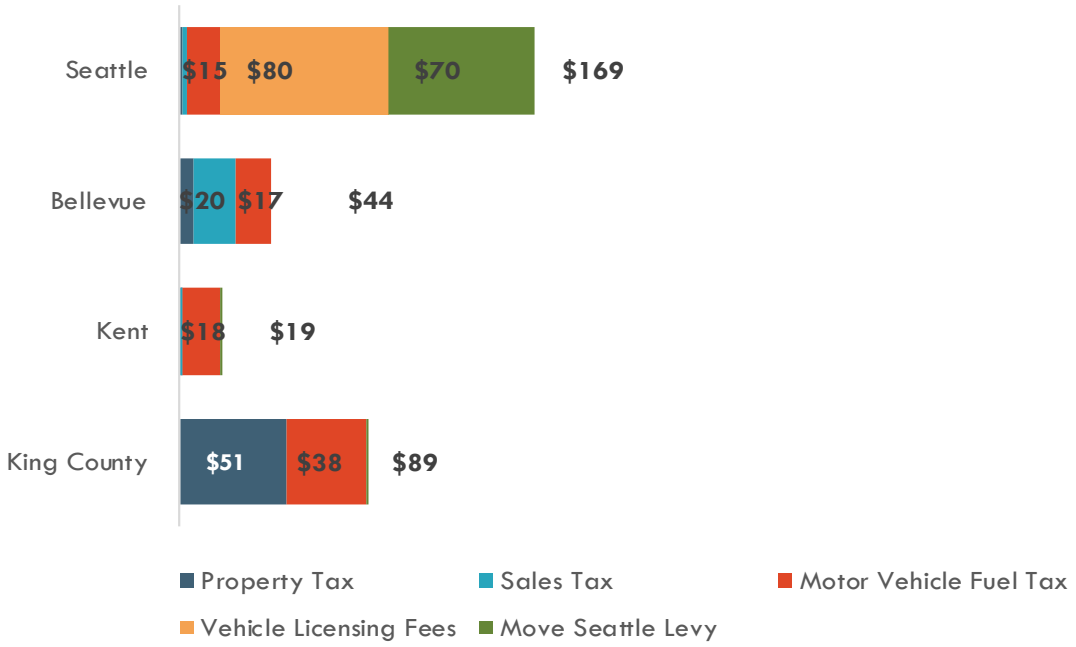
Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; City of Bellevue 2013-2017 data, 2018; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; City of Kent 2013-2017 data, 2018; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; BERK, 2018.

Exhibit 21. Moderate-Income Household Direct Cost Burden, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; City of Bellevue 2013-2017 data, 2018; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; City of Kent 2013-2017 data, 2018; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; BERK, 2018.

Exhibit 22. Low-Income Household Direct Cost Burden, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; City of Bellevue 2013-2017 data, 2018; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; City of Kent 2013-2017 data, 2018; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; BERK, 2018.

Potential Indirect Household Costs

This section addresses fees and taxes that can increase the cost of housing development and transactions and can potentially be passed on to households.[3]

Assumptions

- For homeowner households, one-time costs such as REET and impact fees are assumed to be bundled into the total purchase cost and paid for as part of a 30-year fixed mortgage at 4.7% monthly interest; costs are annualized as one year of monthly payments on the isolated costs of those taxes and fees.[4]
- For renter households, this analysis assumes that the household is living in a unit that was subject to those costs and are recouped at a market capitalization rate of 5.2%.[5]

The market capitalization and interest rates used are conceptual, with estimates based on ideal cases. For mortgage payments and loans, the individual rates and monthly payments made by each household may be impacted by other factors such as available equity, credit scores, etc. Market capitalization rates for rental properties also tend to vary with relative risk, geography, characteristics of the property, and other elements related to profitability versus alternate investments.

The role of older housing units in the market and the impacts to the magnitude and distribution of effects also needs to be highlighted. This analysis assesses impacts on new housing units on the market that are subject to current economic conditions and fee structures. Older housing units that were built when fees were lower (or not charged) and cap rates were different than today's historic lows were likely affected differently at the time of their construction. The calculation of the effects of fees in this analysis are likely to be conservative, and may be lower or non-existent for older housing depending on the context.

Additionally, the distribution of costs will not be similar across socio-demographic groups, as not all households are likely occupants of new housing. Since new housing units are likely to be occupied by higher income residents, these household types are expected to be affected more by fees that increase costs. Conversely, as low-income households may be less likely to live in newer units and affected by fees on new development passed on to renter households.

Because of these considerations, the findings of this analysis should therefore be interpreted as potential costs to households, rather than actual costs. It is important to keep in mind that buyers in local markets influence the allocation of costs between reductions in asset value or increases in rent. Buyers level of willingness to pay into the real estate market will determine how impact fees and/or REET influence rents or prices.

Exhibit 23 shows development costs by source and total development cost for upper middle-income owner households.

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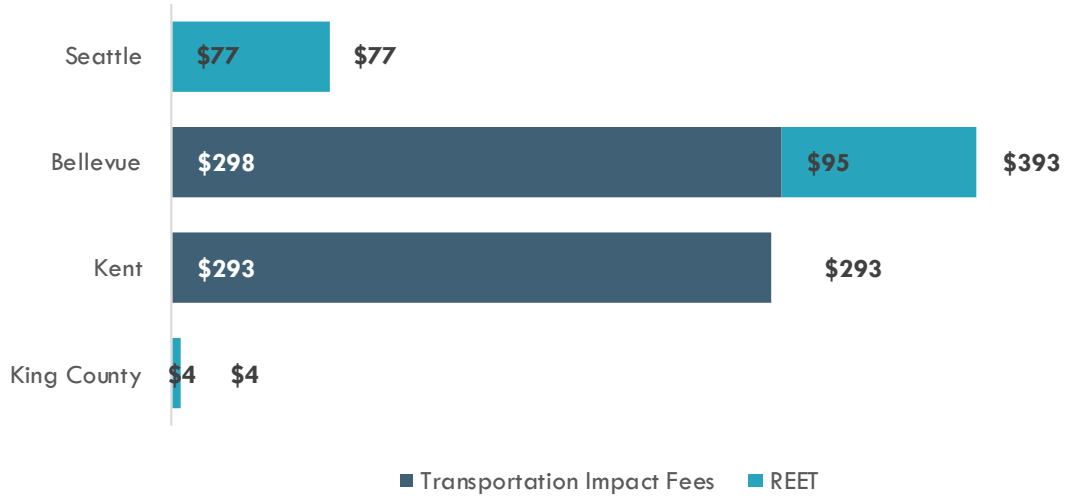
[3] In this analysis, these costs are modeled as if incurred in 2018. This assumption is necessary to maximize the likelihood that the full cost of the tax or fee is passed to the household, and to control for the effect of timing on market values of and capitalization rates on single and multifamily homes.
[4] 4.35% represents the average 30-year fixed rates from more than 100 lenders as reported by Zillow on August 31, 2018.
[5] This average is based on capitalization rates A Class and B Class multifamily buildings, as reported in Cushman and Wakefield's 2017 Cap Rate Survey.

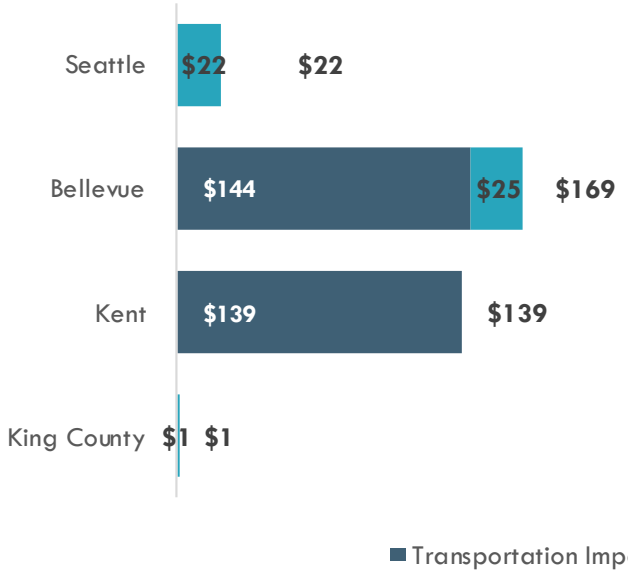
Exhibit 24 and Exhibit 25 show indirect costs by source and total indirect cost for moderate-income and low-income renter households, respectively.

Exhibit 23. Annualized Potential Indirect Costs to Upper Middle-Income Owner Households, 2018



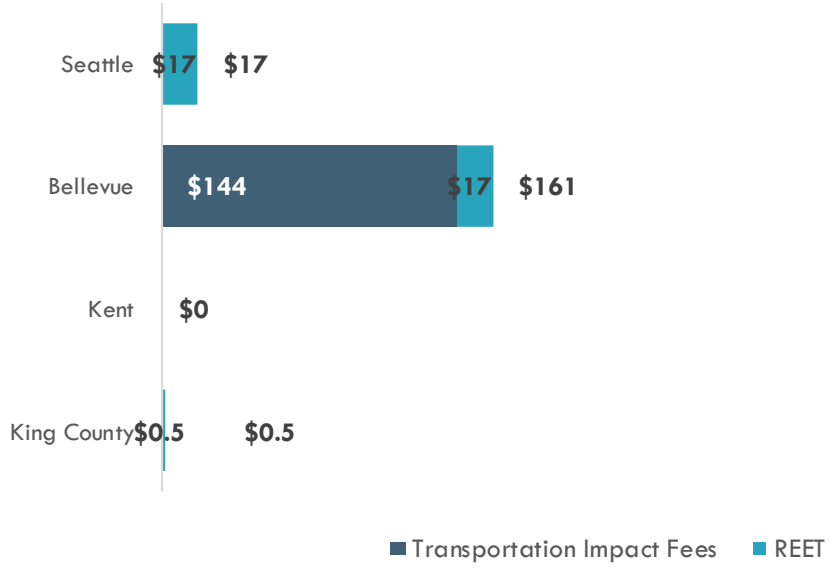
Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; City of Bellevue 2013-2017 data, 2018; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; City of Kent 2013-2017 data, 2018; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; BERK, 2018.

Exhibit 24. Annualized Potential Indirect Costs to Moderate-Income Renter Households, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; City of Bellevue 2013-2017 data, 2018; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; City of Kent 2013-2017 data, 2018; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; BERK, 2018.

Exhibit 25. Annualized Potential Indirect Costs to Low-Income Renter Households, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; City of Bellevue 2013-2017 data, 2018; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; City of Kent 2013-2017 data, 2018; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; BERK, 2018.

Sales tax on construction costs is another type of development cost passed on to the end user household that BERK did not model. Further research and analysis would be needed to determine the cost burden of construction sales tax costs.

TOTAL POTENTIAL COST BURDEN

The summary tables below show the total direct cost burden and the total potential burden (if households incur both direct and indirect costs) in 2018. Each jurisdiction's total cost burden is presented as a percentage of income for upper middle-income homeowner households, moderate-income renter households, and low-income renter households. Tables are provided for each jurisdiction to summarize annual cost burden by source. Potential indirect costs are less likely to accrue to moderate-income and low-income households.

City of Seattle

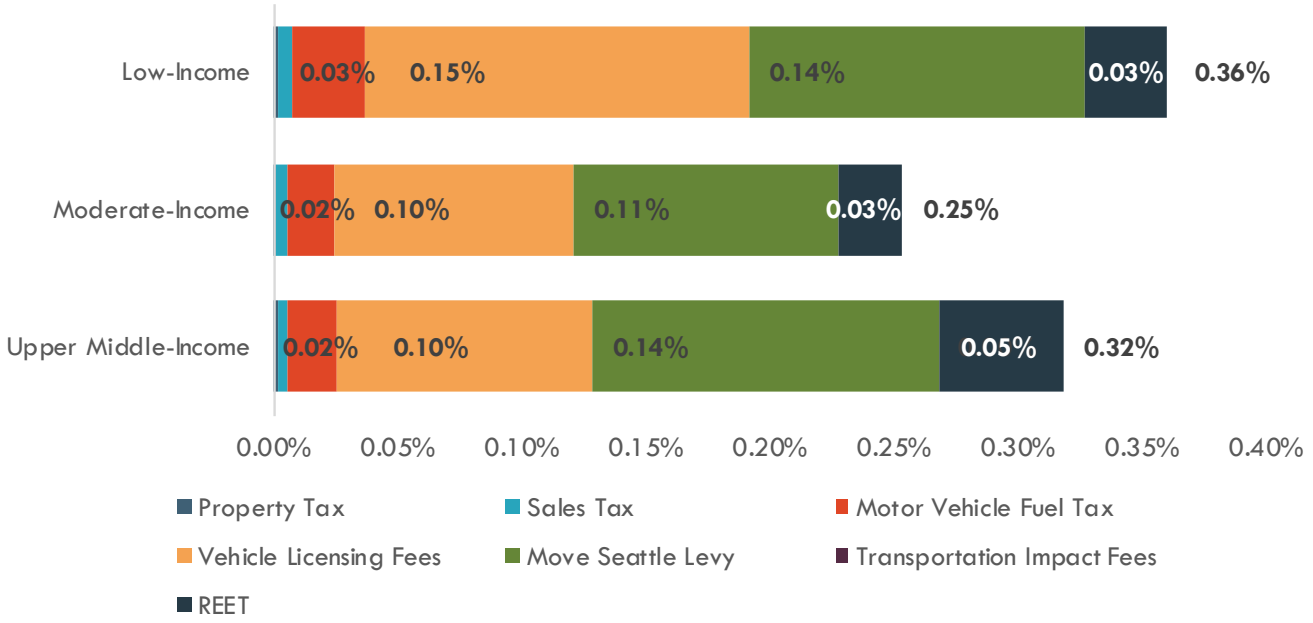
Homeowners contribute to transportation capital projects through property and sales taxes to the General Fund. The Move Seattle Transportation Levy is a voter-approved nine-year property tax levy lid lift for transportation. The City collects Vehicle Licensing Fees through a Transportation Benefit District and levies REET I and II. SEPA mitigation funds are not currently included in this analysis.

Exhibit 26. Seattle Transportation Capital Tax Rates, Fees, and Household Cost Burden

REVENUE SOURCE	2018 RATES	PERCENT DEDICATED TO TRANSPORTATION CAPITAL	ANNUAL COST BURDEN		
			Upper middle-income homeowner	Moderate-income renter	Low-income renter
Property Tax: City portion	$1.245 per $1000 AV (regular levy)	0.3%	$2.24	$0.91	$0.72
Move Seattle Transportation Levy	N/A	100%	$217.51	$88.25	$70.14
Sales Tax: Local portion	3.6%	0.3%	$6.80	$3.92	$3.04
Transportation Benefit District Vehicle Licensing Fees	$80/vehicle per year	100%	$160.00	$80.00	$80.00
Motor Vehicle Fuel Tax (State gas tax): Distribution to cities	$0.02 per gallon	100%	$30.92	$15.46	$15.46
Total Direct Cost Burden, 2018			**$417.47**	**$188.53**	**$169.36**
Direct Cost as Percent of Household Income			**0.27%**	**0.23%**	**0.33%**
Potential Indirect Cost: REET Local portion	*0.5%*	*34.1%*	*$76.77*	*$21.62*	*$17.18*
Total Direct + Potential Indirect Cost Burden, 2018			**$494.24**	**$210.16**	**$186.55**
Percent of Household Income			**0.32%**	**0.25%**	**0.36%**

Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Exhibit 27. Seattle Total Potential Cost Burden as a Percentage of Household Income by Household Type, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Washington Department of Licensing Vehicle Registration Local Fees, 2018; Seattle Comprehensive Financial Annual Report, 2016; State Auditor's Office Local Government Financial Reporting System, 2016; City of Seattle 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Low-income renter households in Seattle pay the largest share of their income for transportation capital projects, with TBD vehicle licensing fees the largest share of income.

City of Bellevue

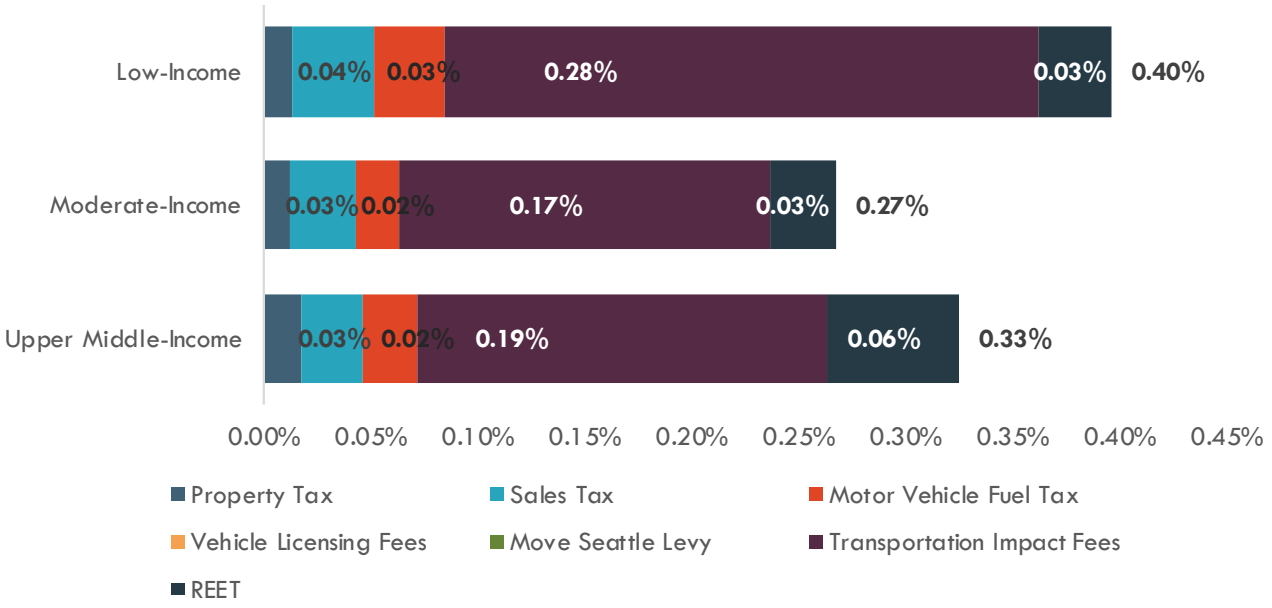
The City of Bellevue levies Transportation Impact Fees and collects REET I and II. Homeowners pay property tax and sales tax to the General Fund, which provides funding to transportation capital. SEPA mitigation funds are another source that is not currently included in the analysis.

Exhibit 28. Bellevue Transportation Capital Tax Rates, Fees, and Household Cost Burden

REVENUE SOURCE	2018 RATES	PERCENT DEDICATED TO TRANSPORTATION CAPITAL	ANNUAL COST BURDEN		
			Upper middle-income homeowner	Moderate-income renter	Low-income renter
Property Tax: City portion	$1.02655 per $1000 AV	3.36%	$27.28	$9.69	$6.74
Sales Tax: Local portion	3.5%	2.05%	$44.98	$25.91	$20.12
Motor Vehicle Fuel Tax (State gas tax): Distribution to cities	$0.02 per gallon	100%	$38.67	$17.10	$17.10
Total Direct Cost Burden, 2018			**$110.93**	**$52.70**	**$43.96**
Direct Cost as Percent of Household Income			**0.07%**	**0.06%**	**0.09%**
Potential Indirect Cost: Transportation Impact Fees	***Single family:*** *$4,989* ***Multi-family:*** *$2,744*	*100%*	*$298.03*	*$143.65*	*$143.65*
Potential Indirect Cost: REET Local portion	*0.5%*	*33.93%*	*$95.17*	*$24.94*	*$17.35*
Total Direct + Potential Indirect Cost Burden, 2018			**$504.13**	**$221.29**	**$204.96**
Percentage of Household Income			**0.33%**	**0.27%**	**0.40%**

Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; State Auditor's Office Local Government Financial Reporting System, 2016; City of Bellevue 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Exhibit 29. Bellevue Total Potential Cost Burden as a Percentage of Household Income by Household Type, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Bellevue Comprehensive Financial Annual Report, 2017; Bellevue Transportation Impact Fees, 2018; State Auditor's Office Local Government Financial Reporting System, 2016; City of Bellevue 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Low-income renter households in Bellevue pay the largest share of their income for transportation capital projects, with transportation impact fees the largest source if those indirect costs are passed onto households.

City of Kent

In addition to the typical property and sales taxes sources, Kent collects a Street Business and Occupation Tax (B&O Tax), established in 2013, which pays for critical street repairs to ensure and safe and efficient transportation system. The Street B&O Tax is not reflected in this analysis since the burden falls on business owners. Kent does not use REET to fund transportation capital. SEPA mitigation funds are another source not currently included. Kent has different transportation impact fees for buildings outside downtown or inside downtown.

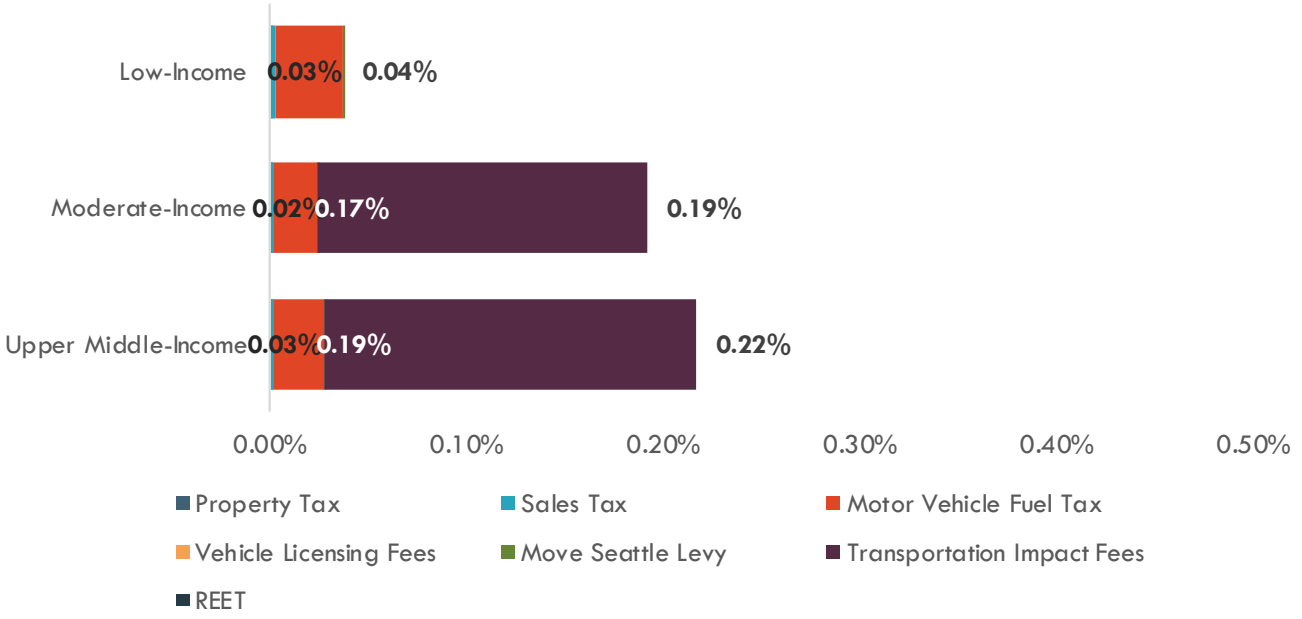
Exhibit 30. Kent Transportation Capital Tax Rates, Fees, and Household Cost Burden

REVENUE SOURCE	2018 RATES	PERCENT DEDICATED TO TRANSPORTATION CAPITAL	ANNUAL COST BURDEN		
			Upper middle-income homeowner	Moderate-income renter	Low-income renter
Property Tax: City portion	$1.627 per $1000 AV	0.1%	$0.53	$0.21	$0.16
Sales Tax: Local portion	3.5%	0.1%	$2.22	$1.28	$0.99
Motor Vehicle Fuel Tax (State gas tax): Distribution to cities	$0.02 per gallon	100%	$40.80	$18.03	$18.03
Total Direct Cost Burden, 2018			**$43.56**	**$19.53**	**$19.19**
Direct Cost as Percent of Household Income			**0.03%**	**0.02%**	**0.04%**
Potential Indirect Cost: Transportation Impact Fees: outside the downtown area	***Single family:*** *$4904.93* ***Multi-family:*** *$2658.06*	*100%*	*$293.01*	*$139.15*	*$0*
Potential Indirect Cost: REET Local portion	*0.5%*	*0%*	*$0*	*$0*	*$0*
Total Direct + Potential Indirect Cost Burden, 2018			**$336.57**	**$158.68**	**$19.19**
Percentage of Household Income			**0.22%**	**0.19%**	**0.04%**

Notes: We assume that low-income renters are not affected by indirect costs of transportation impact fees. Since Kent adopted transportation impact fees in 2010 and we assume that low-income renters are in apartments built prior to 2000, it is unlikely that low-income renters are impacted by indirect costs of impact fees.

Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; State Auditor's Office Local Government Financial Reporting System, 2016; City of Kent 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Exhibit 31. Kent Total Potential Cost Burden as a Percentage of Household Income by Household Type, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; Kent Comprehensive Financial Annual Report, 2017; Kent Transportation Impact Fees, 2018; State Auditor's Office Local Government Financial Reporting System, 2016; City of Kent 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Upper middle-income renter households in Kent pay the largest share of their income for transportation capital projects, with transportation impact fees the largest source if those indirect costs are passed onto households.

King County

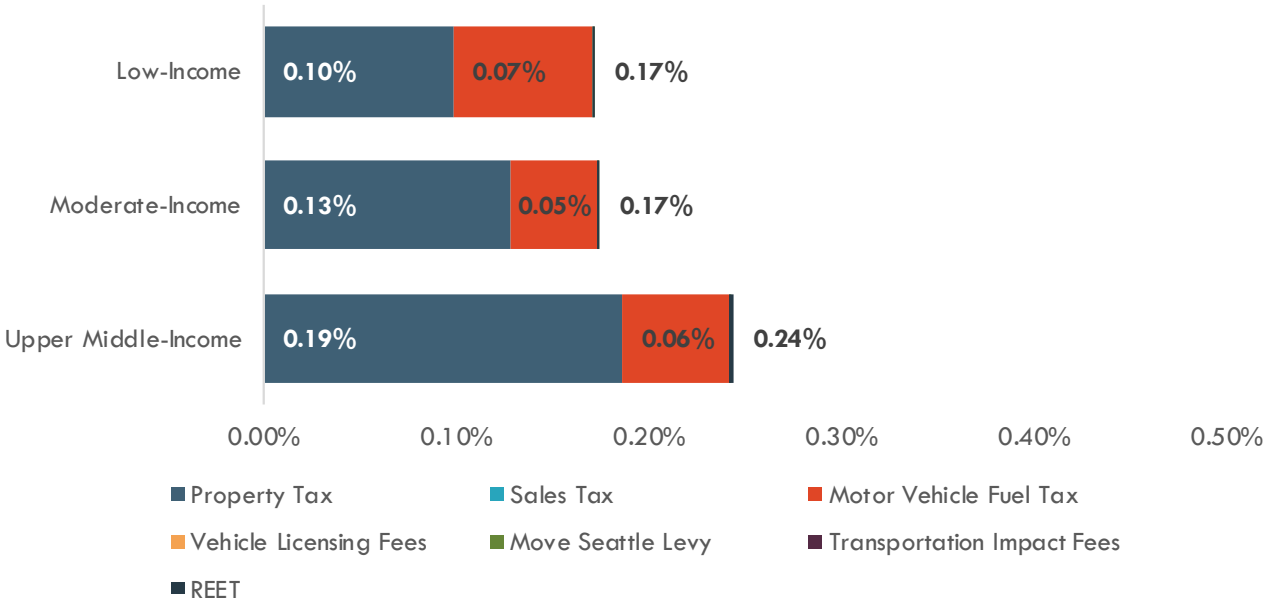
King County primarily funds transportation capital projects from the County Road Fund, which is funded by general Country contributions, a County Road property tax, and grants and other funds. The County collects REET I and II. King County no longer collects Transportation Impact Fees as of the beginning of 2017, and King County has established a Transportation Benefit District (TBD) but it is currently unfunded.

Exhibit 32. Unincorporated King County Transportation Capital Tax Rates, Fees, and Household Cost Burden

REVENUE SOURCE	2018 RATES	PERCENT DEDICATED TO TRANSPORTATION CAPITAL	ANNUAL COST BURDEN		
			Upper middle-income homeowner	Moderate-income renter	Low-income renter
Property Tax: County Road Fund	$2.054 per $1000 AV	32.04%	$288.88	$106.00	$50.87
Sales Tax: Local portion	3.5%	0%	$0	$0	$0
Motor Vehicle Fuel Tax (State gas tax): Distribution to counties	$0.04 per gallon	100%	$85.70	$37.72	$37.72
Total Direct Cost Burden, 2018			**$374.58**	**$143.72**	**$88.59**
Direct Cost as Percent of Household Income			**0.24%**	**0.17%**	**0.17%**
Potential Indirect Cost: REET Local portion	*0.5%*	*2.26%*	*$4.29*	*$0.95*	*$0.46*
Total Direct + Potential Indirect Cost Burden, 2018			**$378.87**	**$144.67**	**$89.05**
Percentage of Household Income			**0.24%**	**0.18%**	**0.17%**

Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

Exhibit 33. Unincorporated King County Total Potential Cost Burden as a Percentage of Household Income by Household Type, 2018



Sources: King County Assessor's Office, 2018; Department of Revenue Local Sales and Use Tax, 2018; Department of Revenue Tax Reference Manuel: Fuel Tax, 2016; King County Comprehensive Financial Annual Reports, 2013-2017; King County 2013-2017 data, 2018; Bureau of Labor Statistics Consumer Expenditure Survey, 2016; BERK, 2018.

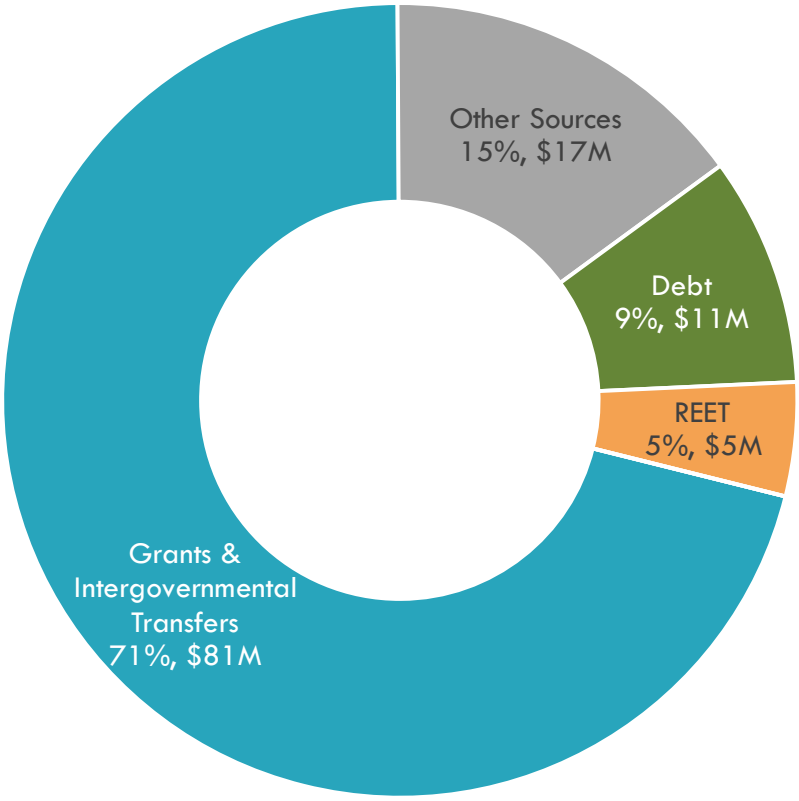
Upper middle-income owner households in unincorporated King County pay the largest share of their income for transportation capital projects, with property tax the largest source.

Appendix

CITY OF TACOMA 2013-2018 REVENUES AND EXPENDITURES

Exhibit 34. Tacoma Transportation Capital Project Funding Revenues, 2013-2018 Total

Total Six-Year Transportation Capital Revenues: $114 million



Grants/Intergovernmental transfers:

- *Federal grants*
- *State grants*
- *State gas tax (MVFT)*
- *Other government agencies*

Other sources:

- *Interest earnings*
- *Public utility*
- *Private contributions*
- *Public works street operations*

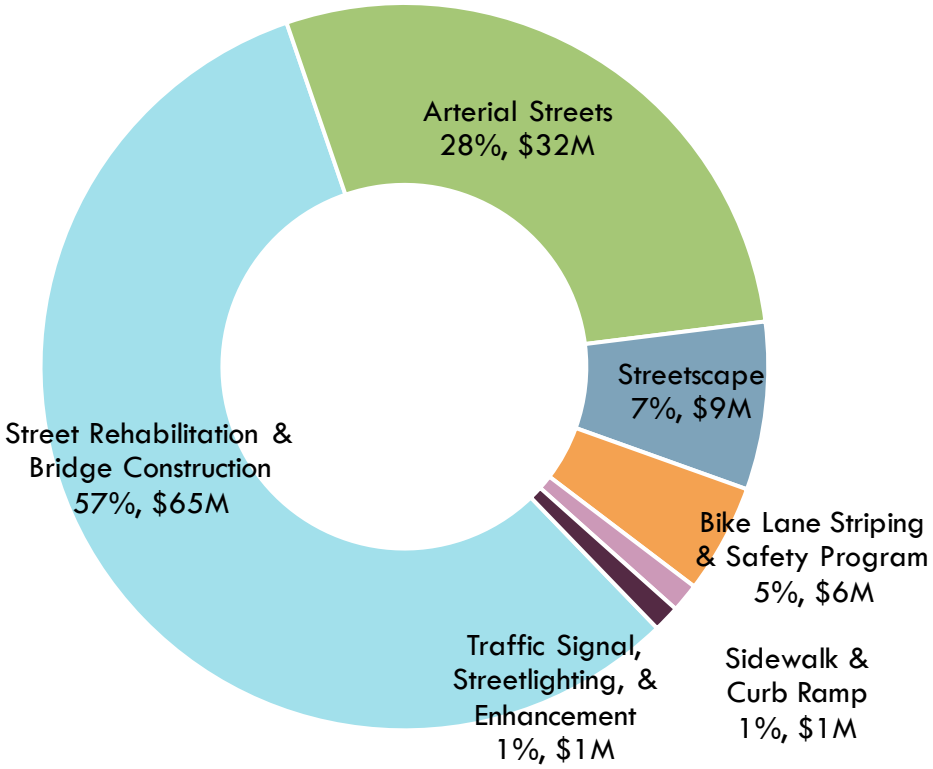
Impact fees, system development charges, or other mitigation revenue

- *Transportation Benefit District: Vehicle Licensing Fees*

Sources: City of Tacoma, 2018; BERK, 2018.

Exhibit 35. Tacoma Transportation Capital Project Expenses, 2013-2018 Total

Total Six-Year Transportation Capital Project Expenses: $114 million



Sources: City of Tacoma, 2018; BERK, 2018.

HOUSEHOLD COST BURDEN DETAILED CALCULATION METHODOLOGY

Exhibit 36. Household Income, Home Value, and Vehicle Assumptions

CHARACTERISTIC	ASSUMPTION	SOURCE
Area Median Income (AMI)	Seattle-Bellevue HUD Metro FMR Area: $103,400 *(applies to Seattle, Bellevue, Kent, King County)* Median household income: ▪ Upper middle-income homeowner household: $155,100 ▪ Moderate-income renter household: $82,720 ▪ Low-income renter household: $51,700	Department of Housing and Urban Development (HUD), 2018
Average vehicle miles traveled (VMT)	▪ Seattle: 13,187 (low/moderate income); 15,083 (upper income) ▪ Bellevue: 16,683 (low/moderate income); 18,863 (upper middle-income) ▪ Kent: 17,592 (low/moderate income); 19,900 (upper middle-income) ▪ Unincorporated King County: [6] 20,470 (low/moderate income); 23,254 (upper middle-income).	Center for Neighborhood Technologies, Housing and Transportation Index, 2018
Average fuel efficiency (miles per gallon)	24 mpg *(Average fuel efficiency of light duty vehicle, short wheel base)*	Bureau of Transportation Statistics, 2018
Assessed Value of median residence	▪ Seattle: $597,000 ▪ Bellevue: $791,000 ▪ Kent: $324,000 ▪ Unincorporated King County: $439,000	King County Assessor's Office, 2018
Market Value of median residence	▪ Seattle: $753,600 ▪ Bellevue: $939,100 ▪ Kent: $390,200 ▪ Unincorporated King County: $634,500	Zillow, 2018
Average Assessed Value per multifamily unit built from 2000-present	▪ Seattle: $242,211 ▪ Bellevue: $280,883 ▪ Kent: $130,019 ▪ Unincorporated King County: $161,079	King County Assessor, August 2018; BERK, 2018.
Average Assessed Value per multifamily unit built before 2000	▪ Seattle: $192,506 ▪ Bellevue: $195,404 ▪ Kent: $97,175 ▪ Unincorporated King County: $77,308	King County Assessor, August 2018; BERK, 2018.

Sources: Department of Housing and Urban Development, 2018; Center for Neighborhood Technologies: Housing and Transportation Index, 2018; Bureau of Transportation Statistics, 2018; King County Assessor's Office, 2018; Zillow, 2018.

[6] Sammamish is used as proxy for unincorporated King County to develop VMT estimations.

Exhibit 37. Methodology of Calculating Household Cost Burden by Revenue Source

REVENUE SOURCE	OWNER HOUSEHOLDS	RENTER HOUSEHOLDS
Property tax: City or County portion	1. Calculate property tax paid annually based on home value assumption. (Source: King County Assessor 2018) 2. Determine proportion of property taxes that go to transportation CIP. (Sources: Comprehensive Annual Financial Reports, City-provided data) 3. Multiply household's estimated property tax paid by the proportion of property tax revenue that goes to transportation CIP.	1. Calculate average property tax paid by apartment property owners, per unit. (Source: King County Assessor 2018) ○ For moderate-income household, use buildings built from 2000-present. ○ For low-income household, use buildings built before 2000. 2. Determine proportion of property taxes that go to transportation CIP. (Sources: Comprehensive Annual Financial Reports, City-provided data) 3. Multiply per unit property tax paid by the proportion of property tax revenue that goes to transportation CIP.
Sales tax on household consumption: Local portion	1. Determine annual consumer spending assumption by household income. (Source: Bureau of Labor Statistics Consumer Expenditure Survey) 2. Determine proportion of sales taxes that go to transportation CIP. (Sources: Comprehensive Annual Financial Reports, City-provided data) 3. Multiply consumer spending by local sales tax rate to calculate local sales tax paid. 4. Multiply local sales tax paid by the proportion of sales tax revenue that goes to transportation CIP.	
REET: Local portion	1. Determine proportion of REET that goes to transportation CIP. (Sources: Comprehensive Annual Financial Reports, City-provided data) 2. Calculate tax as one-time cost of buying a home. 3. Annualize the cost as one year of monthly mortgage payments at the average 2018 30-year fixed rate on the isolated REET cost.	1. Calculate average REET paid for property acquisition for new apartment projects over past five years, per developed unit. 2. Annualize average cost per unit based on market capitalization rates for multifamily development.
Transportation Benefit District: Vehicle licensing fees	1. Calculate annual fees based on household vehicle assumptions. (Source: Department of Licensing)	
Motor Vehicle Fuel Tax (State gas tax): Distribution to cities or counties	1. Use VMT and fuel efficiency assumption to calculate average annual household fuel spending. 2. Multiply annual fuel tax paid by state distribution to local jurisdiction (city or county).	

Transportation impact fees	1. Use single-family transportation impact fee. 2. Annualize the cost of monthly mortgage payments at the average 2018 30-year fixed rate on the isolated impact fee cost.	1. Use multi-family transportation impact fee. 2. Calculate average impact fees paid by apartment developer, per unit. 3. Annualize the average cost per unit based on market capitalization rates for multifamily development.

Notes: City of Bellevue 2018 transportation impact fees: $4989 residential single family, $2744 residential multifamily; City of Kent 2018 transportation impact fees: $4904.93 residential single family outside downtown, $2658.06 residential multifamily in downtown; $3317.32 residential single family outside downtown, $2152.55 residential multifamily in downtown.